

# WATER TREATMENT

"Innovative water treatment, energy savings, and enhanced performance"







# **EXCEPTIONAL SERVICE**

Having Competitive Choice, Inc. as your trusted partner grants you peace of mind, as your water treatment systems operate seamlessly, leading to heightened efficiency and cost savings. Our solutions are tailored to suit your specific needs, and we remain deeply engaged in every aspect throughout the process. Your project will be under the expert supervision of industry leaders who possess the knowledge and experience to proactively address any emerging issues and resolve them before they escalate into significant problems.

#### **Treatment Solutions**



Boiler Water



Reverse Osmosis



Cooling Water



Cleaning



Potable Water



Bioaugmentation



Waste Water

We provide innovative water treatment techniques creating energy savings while enhancing performance. With our customized solutions:

- Equipment and piping will last longer
- Energy costs and water loss will be minimized
- Employee safety will be maximized

We offer a range of specialized chemicals, services, and solutions designed to:

- Reduce operating costs
- Increase plant productivity
- Meet environmental requirements





# **SMALL BUSINESS, HUGE GAINS**

As a small, woman-owned business, Competitive Choice, Inc. has proved that being small has big benefits. We are big enough to have the skill, dedication, and experience necessary to solve your water issues but small enough to care about your individual needs and stay involved with the smallest details.

With more than 20 years of water treatment experience, we have provided service and support for a broad range of satisfied clients, including the federal government and a host of commercial and industrial facilities throughout the United States.

# 20 Years of water treatment experience

In each case, we provided top-notch service and remained attentive to the needs of each customer- as if that client is our one and only customer.

#### Some of our clients include:



Texas A&M University



City of Houston



VA Hospital

## **LEADING THROUGH INNOVATION**

Competitive Choice, Inc. is more than a traditional chemical company. By being our clients' water-treatment partner, we place equal emphasis on service and performance, setting us apart from the competition. Customers consistently praise our:

- Experienced and knowledgeable personnel
- Exceptional technical support
- Excellent performance







With over 20 years of experience in product formulation and technical support, Competitive Choice, Inc. application specialists are unmatched in their inventiveness and thoroughness. Also, we seek to develop improved products that are consistent with standards of the Safety & Environmental Offices. Together, our experts ensure that you get the latest chemical technology with the ultimate energy and equipment efficiencies, while always meeting the industry's ever-changing needs.

#### We stay up-to-date:

- Routinely refine our treatment plans and services
- Meet the changing needs of our diverse customers
- Meet the changing needs of the industry

Helps save you time and money!



# LAB SUPPORT / ANALYSIS

Competitive Choice, Inc. is supported by our partners who maintain an in-house laboratory located in Burlingame, California. Competitive Choice, Inc. provides a variety of analytical services in support of the industrial water treatment industry.

## The following are some of the general services we offer:

## **Water Analysis**

- Wet chemical analyses (pH, conductivity, alkalinity, sulfite)
- Trace metals analyses by ICP
- Anions and amines analyses by IC
- ISE analyses (flouride, total residual chlorine, ammonia)
- HPLC analyses (glycols, azoles, organic acids)
- UV-Vis analyses (phosphates, polymers, hexavalent chromium)
- Aggregate organic constituents (COD, Oil & Grease, TRPH, MBAS)
- Solids analyses (TSS, TDS, TS) and turbidity analyses
- Particle size and count analysis
- Regulatory drinking water and wastewater analysis for California clients

## **Deposit Analysis**

- XRD compound identification (e.g. calcite, hydroxyapatite, magnetite)
- XRF elemental analysis (Na through U)
- FTIR analysis
- Microbiological examination
- · Loss on ignition

## **Other Analyses**

- Ion-exchange resin analysis
- Corrosion coupon evaluation
- Product formula analysis
- Corrosion and failure analysis
- Photomicrography and microscopy services



# COOLING, BOILER, & WASTE WATER TREATMENT

## **Cooling Water Treatment**

CCI's approach to tower care enhances energy efficiency, preserves assets, reduces labor, and most importantly, minimizes the risk for waterborne pathogens.

Dispersants aid in the removal of mud, silt, iron oxide, sand, and debris from all piping and tower surfaces.

**Biocides** control algae, fungi, and bacterial slimes under varying conditions of pH, temperature, total dissolved solids, and environmental debris.

**Inhibitors** control corrosion and scale under varied conditions of make-up, temperature, and cycles of concentration.



## **Boiler Water Treatment**

#### **Boiler Water**

CCI's boiler water treatment products are designed to accommodate systems of all types and sizes, whether commercial buildings, industrial plants, or power generating stations.

#### Steam & Condensate

CCI offers neutralizing amines, filming amines, and ammonia based corrosion inhibitors to control steam line and condensate return line corrosion



#### Waste Water Treatment

The growing trend towards conserving and reusing our natural resources has resulted in stricter wastewater discharge standards and drinking water quality.

CCI enables you to use single source for coagulants, flocculants, chemical feed equipment, storage and monitoring equipment and water and wastewater treatment systems and upgrades.

### **Coagulants: Liquid**

Competitive Choice offers a broad line of inorganic, organic and inorganic/organic blended coagulants. These products are very effective substitutes for the traditional inorganic salts of aluminum and iron. Being more effective and performing at lower doses, Competitive Choice coagulants produce significantly less sludge compared to iron and aluminum based coagulants. Competitive Choice coagulants:

- Accelerate and improve oil and grease removal
- Efficiently aggregate and enhance removal of fine suspended particles
- Work over a broader pH range than traditional inorganic coagulants
- Reduce or eliminate the need for make up caustic or alkalinity
- Contain high activity to allow for lower feed rates

### Flocculants: Dry Powders, Liquid, and Emulsions

Competitive Choice offers a broad range of flocculants in all three products forms: emulsion, liquid and dry. A complete matrix of flocculants is maintained in order to enable the best performing flocculant selection. A large flocculant matrix allows a precise product selection. It also enables the substitution of a very close or even very far away flocculant when a substrate change dictates the need for a flocculant change. Competitive Choice flocculants:

- Increase dryness in dewatering operations resulting in savings in disposal costs
- Increase throughput or flow rates in thickening, clarifying and dewatering operations
- Reduce or eliminate process upsets
- Improve clarification during upsets in biological processes
- Capture insoluble matter in wastewater that would otherwise be discharged with plant effluent.





# **UNMATCHED SITE MAINTENANCE**



Competitive Choice, Inc. representatives visit your facilities as often as necessary to ensure the treatment program is being properly applied and superior results are being obtained. During regular service visits, the representative performs the following services:

- Provide "Full Service", including the handling of all chemicals
- Provide 24-hour emergency response
- Maintain and repair all chemical feed equipment, including controllers, pumps, etc.
- Review progress on the current program
- Discuss any operating or water related questions or problems
- Inspect any open systems
- Run tests on all pertinent samples from all treated systems
- Submit a complete written report of all findings and recommendations

# **DEVISING A PROGRAM**

We're here to enhance your water treatment program's performance and generate energy savings. With our customized solutions, your equipment and piping will last longer and employee safety will be maximized. We will help reduce operating costs, increase plant productivity, meet environmental requirements, maintain your central cooling and boiler plants, and reduce your energy fuel and water consumption.

Give us a call today, so that we can begin to devise the right water treatment program for you tomorrow!







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