

# Chemical Treatment and Optimization Service



## Understanding the Chemical Needs of Industrial and Municipal Water and Wastewater Treatment.

Operators Unlimited understands the challenges of the wastewater treatment process. We assist our customer partners in the selection, custom development and optimization of their chemical process. This begins with a chemical assessment and analysis and ends with a compliant effluent. Operators Unlimited provides our customer partners the ability to achieve predictable wastewater operational efficiency, compliance and cost predictability.

### Separators

One of the biggest challenges in wastewater treatment is the removal of solid particles from the water. OU offers a variety of chemicals to aid in the removal and separation of solids and liquids.

### Flocculants (Dry and Emulsion)

Flocculation treatment chemicals assist in the solids/liquid separation of suspended particles in solution to improve clarification, flotation and solid dewatering.

### Coagulants (Inorganic, Organic and Specialty Blends)

Coagulation treatment chemicals treat water for suspended solids removal by neutralizing the negative electrical charge on particles.

### pH Adjustment

Permit requirements dictate the effluent from a plant to be within a certain range or at a certain pH level before it can be released or disposed of. The most common acid used is **Sulfuric Acid**. This is

due to its cost, abundance and effectiveness in adjusting the pH level. Other acids that are used include **Hydrochloric Acid** and **Phosphoric Acid**.

### Defoamers

Foam can often develop in the wastewater treatment process, which can cause many problems. Foam can prevent measuring instruments from getting a true reading and can cause other difficulties.

Surface tension reduction and bubble-wall destabilization products eliminate foam in boilers, cooling towers and effluent systems to ensure smooth operating conditions.

### Odor Control

Industrial plants are faced with a variety of odor problems similar to those faced by municipal wastewater treatment plants. Operators Unlimited offers multiple technological and chemical solutions to support odor control, including misting solutions to deodorize the air and high performing odor controlling chemicals like our **OC 150**.





## Sludge Removal

Removing water from sludge is a time consuming and necessary process. Often polymer chemicals are often re-introduced into this stage of treatment to remove the water. The OU 9200 can be added to your wastewater to aid in the process and used in conjunction with presses and geotextile bags.

## Custom Blends

When it comes to water and wastewater chemicals, whether for industrial pretreatment or municipalities, we primarily blend and manufacture our own formulas. There are instances when a custom blend is needed. Our Technical team will conduct an analysis of your current influent and develop a custom blend to aid in the clarification of your wastewater.

## Custom Equipment Solutions

We provide a full range of equipment needed to treat, test, automate, move and store water and fulfill the chemistry needs of your facility. From chemical feed systems to controls we design and install the equipment needed for an efficient system process.

## Service Offerings



Chemical Treatment and Optimization



Operational Support and Staffing



Equipment



Engineering Services



Educational Resources

