



# KEMCO SYSTEMS

WATER & ENERGY SOLUTIONS  
industry leader since 1969

FALL 2016

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## CALENDAR:

TRSA Annual  
Conference  
Sept. 19 - 21  
Chandler, AZ

## MAINTENANCE TIP:

### GAS SAFETY

Kemco gas fired water heaters need to be checked for gas leaks on all of the gas piping, valves and fittings. This should be leak checked with a spray bottle of soapy water or approved leak check from supply house (Home Depot, Lowes, etc.). If bubbles occur anywhere when spraying, there is a leak that will need to be fixed.

1. Make sure all gas mains are turned off to heater or area to be worked on before the leak repair is started.
2. Once all leaks have been repaired turn gas back on and repeat leak check test again.
3. If no leaks, great! Turn on heater control power the red light with LOW GAS should be on. Now you need to Reset low gas switch on heater next to the burner and light will go away. This also shows your low gas safety switch is working fine

Doing this check quarterly will ensure you have a safe working environment as well as savings on your fuel bill.

## KNOW YOUR IMPACT

We are all thankful for the little things that make our lives easier and more efficient, like ready-to-eat meals when we don't want to cook, or clean sheets when crawling into a hotel bed after a 12-hour flight. The industries that provide these wonderful, yet sometimes taken for granted luxuries, are Food Processing and Commercial Laundries. While these industries make our lives easier, they also produce a significant amount of wastewater. This wastewater is monitored by Publicly Owned Treatment Works (POTW) and if the POTW doesn't like what you're putting back into the environment, there can be surcharges, fines and even shutdowns.

The food and laundry industries have processes that generate high-strength wastewater. Since POTW's are usually designed to treat domestic sewage and not industrial wastewater, the concentrations of chemicals and contaminants in the industrial wastewater can affect the ability of the treatment plants to effectively treat all the wastewater coming to them.

When evaluating your plant's discharge of industrial wastewater, keep in mind that guidelines vary across municipalities. Some permits have established guidelines and others are provisional, or temporary, and use an analysis of a period of time to establish guidelines or they may have high limits on surcharges, while many have no limits. In short, knowing and understanding your industrial wastewater discharge permits is important to the sustainability of your business.

Now that you know your guidelines, let's work further on your plant's sustainability. Industrial wastewater treatment covers the methods used to treat wastewater that is produced as a by-product of industrial or commercial activities. After treatment, the treated wastewater, or effluent, may be reused or released to a sanitary sewer or POTW. The mass flow, temperature, and strength (concentration) of industrial wastewater streams directly impacts the ability of the POTW to process and achieve final disposition to surface water or reuse streams.

Concentrated constituents that are typically monitored closely due to their impact are; Dissolved Oxygen and Biochemical Oxygen Demand (BOD), pH, Total Suspended Solids (TSS), conductivity, alkalinity, and fecal coliform. BOD and Suspended Solids are typical constituents monitored by the POTW and are used as a basis to establish surcharges. Other constituents like heavy metals and Fats, Oils and Greases (FOG's) are often not acceptable and can result in fines or shutdowns.

Choosing the right partner to guide you through your wastewater treatment and reuse challenges is important and can be instrumental in accomplishing your goals. Kemco has over 30 years in wastewater treatment and reuse innovation and we welcome the opportunity to work with you.



Wastewater Treatment Plant - Clearwater, FL

## FEATURED PROJECT

BHJ USA in St. Joseph, MO is a processor of meat and meat byproducts for the pet food industry. They operate 24/7 and generate wastewater throughout the entire day. The wastewater contains levels of fats, oils & greases, and total suspended solids in excess of the levels permitted to be discharged to the municipal sewer in St. Joseph. Therefore, in order to operate the plant, they needed a waste water treatment system to reduce these levels.



*Dissolved Air Flotation System - BHJ USA*

BHJ had many years of experience with Kemco Systems in another of their plants and decided to enter into discussions with them about their new plant. Together they evaluated BHJ's needs and the decision was made to utilize a DAF (Dissolved Air Flotation System) as the main treatment process. The DAF is supplemented by a rotary screen to remove large solids prior to the DAF. The action of the DAF is supplemented by coagulating and flocculating chemicals supplied by a local vendor. Kemco also supplied a 5.5 million btu/hr., On-Demand, 99.7% efficient water heater to meet the facility's hot water needs. In conjunction with BHJ and BHJ's mechanical contractor Kemco's Engineering Department did all the piping, electrical, and mechanical design for the heater and waste water treatment equipment.

ACTUAL KEMCO DAF RESULTS - BHJ USA			
PARAMETER	RAW*	TREATED*	% REMOVED
BOD	1,920	930	51%
TOTAL SUSPENDED SOLIDS	532	76	85%
OIL & GREASE	196.5	16.5	91%

\*RESULTS IN PPM

## PROVIDING INDUSTRY SAVINGS FOR OVER 40 YEARS

### TRSA ANNUAL CONFERENCE

Step away from your routine into a few days of enrichment with textile services peers to share professional experience and socialize at the TRSA Annual Conference & Executive Exchange. Catch up with existing contacts and make new ones from TRSA members: North America's leading textile services companies, accounting for more than 90% of linens and garments processed; independents and nationals covering the industrial/uniform, healthcare, F&B and hospitality markets.

- Enjoy education sessions together
- Collaborate on TRSA projects in committee meetings
- Strengthen your professional network

**SEPT. 19 - 21** [www.trsa.org/](http://www.trsa.org/)  
**CHANDLER, AZ** annual conference

### KEMCO NEW HIRES

Welcome! We look forward to many anniversaries with you!

Jason Smith  
 John Sutton  
 Shawn Mclean  
 Philip Hunt  
 Michael Coughlin  
 Corey Bump  
 Fabian Bump  
 Matthew Koch  
 Courtney Manning  
 Tara Jennings

### KEMCO ANNIVERSARIES

Thank you to our dedicated employees for your continued hard work and contributions to Kemco's success!

Katt Vongsavanh	1 year
Bernie Pender	1 year
Rodney Whorley	3 years
Paul Frederick	4 years
Larry Wainwright	4 years
Victor Ramirez	4 years
Jo Ann Cansler	6 years
Jim Springstroh	6 years
Eric Mueller	7 years
Sam Villalpando	10 years
Doug Cunningham	10 years
Dinh Nguyen	11 years
Brenda Broome	12 years
Pete Weck	13 years
Bill Howard	31 years
Rod Kummer	33 years
Steve Knoll	39 years

