## **IN THIS ISSUE:** USING **RYDLYME** TO CLEAN COOLING TOWERS -BRING BACK EFFICIENCY!

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## SPRING CLEANING - USING **RYDALL MP** AT OUR CORPORATE OFFICE!

CIRCULATE **RYDLYME** WITH AN INDUSTRIAL DESCALING SYSTEM!

### NEWS ON SAFE CHEMICAL SOLUTIONS FROM APEX ENGINEERING PRODUCTS CORPORATION

# **Cooling Tower Cleaning**

## Get RYD of the water scale that may be increasing your energy bill.

The basic principal of a cooling tower is to cool the water that has picked up heat generated by equipment within and around a facility.

The operation begins in the tower basin where the cooled water is pumped out into the facility and utilized for cooling the equipment on the tower system. As that equipment is cooled, the water picks up the heat and returns to the top of the cooling tower. The hot water is distributed onto a hot deck or through the spray nozzles that evenly distribute it over the tower fill media.

The tower fill media is designed to increase surface area, as well as contact time between air and water. This enhances evaporation and allows further cooling of the tower water. The water then falls into the tower basin where it is then pumped back into the facility to cool the system equipment.

Scaling within a cooling tower can restrict

the water distribution of spray nozzles, reduce the water flow through the openings of a hot deck and restrict the air flow within the tower. All of these conditions will result in diminished cooling capacity and inefficient operation of the associated equipment on the cooling tower system.

A cooling tower system can be cleaned by adding **RYDLYME** to the tower basin, thus allowing the towers' transfer pump to circulate the solution throughout the tower and the equipment it is cooling. This can be accommodated during the normal operation of the cooling tower without shutdown! It is imperative when calculating a required amount of **RYDLYME** needed for a cooling tower system to include enough **RYDLYME** for the equipment load of the tower.



A cooling tower before and after a *RYDLYME* cleaning!





**RYDLYME** can be purchased in various sized containers to solve your scaling issues.





### **CONTRACTOR CHILLER CONDENSER TUBE CLEANING**

A mechanical contractor was tasked to complete a condenser barrel cleaning on a 250 ton chiller. The chiller was having issues with the approach temperature and was operating inefficiently. Based on previous experience, the contractor chose **RYDLYME** to dissolve the water scale from the chiller's condenser tubes via circulation.

Fifty gallons of **RYDLYME** was circulated for five hours and then inspected - due to the severity of the scale deposits, an additional fifty gallons of **RYDLYME** was circulated to dissolve all of the efficiency robbing barrier. After circulation and final inspection, the chiller's condenser tubes were found to be restored to bare metal and their copper shine. The approach temperature prior to the **RYDLYME** cleaning were 15°F. After the **RYDLYME** cleaning the approach temperature were reduced to 6°F! The customer was thrilled to have the equipment operating efficiently once again, saving money on their energy usage.



#### CHALLENGE

A 250 ton chiller afflicted with water scale deposits had approach temperature 10°F above normal.

#### SOLUTION

A total of 100 gallons of **RYDLYME** was circulated through the chiller's condenser tubes for 13 hours due to scale severity.

#### RESULTS

Approach temperature was restored to 6°F and the customer was delighted. Remaining chillers in the facility will utilize **RYDLYME** and are scheduled to return approach temperature to normal.











**RYDLYME** Industrial Descaling Systems are specifically designed to circulate **RYDLYME** biodegradable descaler through a vast array of equipment and systems keeping your facility in peak operating condition.

We proudly offer Iwaki seal-less magnetic drive pumps and air powered double diaphragm pumps also available on a cart system.



Shown



15MDC





10MDC



Pumpmaster 115v



15MDO



10MDO



15PPO



15PPC



10PPC



10PPO

RTK 350

30PPO

## **SPRING START-UPS FOR HVAC**







While **RYDLYME** is the ideal product for cleaning chillers, cooling towers and more, we have exceptional biodegradable products for other vital HVAC components.

**RYDALL CC Coil Cleaner** safely and effectively cleans air-cooled condensers, permanent air filters, evaporator coils, window units and any other finned cooling/heating coils or equipment. It can be applied **INDOORS** or **OUTDOORS** as a non-foaming spray or through a foaming applicator to penetrate deep into the coil beds eliminating the need to carry multiple products to successfully complete a job. **RYDALL CC** is also safe on rubber membranes including roofing material!

**RYDALL MP Multi Purpose Degreaser** is a biodegradable, medium-duty surface degreaser/ cleaner that quickly and safely removes oil, grease, grime, dirt and other contaminants from all surface types and components. **RYDALL MP** completely rinses off pollutants **WITHOUT** leaving behind a greasy film. Check out the photo above of our corporate outdoor sign we cleaned using **RYDALL MP**!

If you are in HVAC and would like to learn more about **RYDALL CC** and **RYDALL MP**, as well as **RYDLYME**, contact us **HERE** or call **800.451.6291** or **630.820.8888**.



#### **DESCALER & PUMPING SYSTEMS**



PUMPING SYSTEMS

**RYDLYME** biodegradable descaler is uniquely formulated to dissolve the toughest water scale, lime scale, mud and rust deposits from virtually any water-operated equipment. NSF A3 and ANSI 60 certified.

**RYDLYME Pumping Systems** are specifically designed to circulate **RYDLYME** through a vast array of equipment and systems to keep your facility at peak operating condition.

#### CLEANERS, DEGREASERS & HAND SANITIZER













**RYDALL CC Coil Cleaner** is a biodegradable, concentrated solution that is safe for indoor and outdoor cleaning of air exposed surfaces on HVAC/R equipment. Dilutable and capable of being applied via foaming applicator. NSF A3 certified.

**RYDALL MP Multi Purpose Degreaser** is a biodegradable, versatile cleaner that quickly and safely removes oil, grease, grime and other pollutants from wettable surfaces and components. NSF A1 certified.

**RYDALL HD Heavy Duty Degreaser** is a biodegradable heavy duty, industrial grade degreaser. Used specifically on all carbon based derivatives that are found on the oil and/or process sides of your critical equipment or systems.

**RYDALL VP Specialized Degreaser** is a biodegradable, pH neutral degreaser specifically designed to safely and quickly clean and degas refinery process equipment. It can be applied in circulation or vapor phase applications.

**RYDALL DC Deodorizing Cleaner** is a biodegradable, ultra-concentrated cleaner designed to be used generally in janitorial applications such as floor, bathroom and window cleaning.

**HAND SANITIZER** is formulated according to WHO guidance, AEPC's Hand Sanitizer utilizes an Isopropyl Alcohol Antiseptic 75% Topical Solution which helps reduce bacteria that potentially can cause disease.

#### ODOR CONTROL, WATER TREATMENT & WASTE CONVERSION







**RYDALL OE Odor Eliminator** is a unique, environmentally beneficial additive that is applied to landfills, compost or other organic odors. Naturally enhances methane release and production. Contains no masking agents, essential oils or fragrances.

**RYDALL WO Water Optimizer** is an environmentally beneficial additive that naturally reduces and prevents the formation of  $H_2S$ , COD, BOD, FOG, TDS and TSS. Thereby reducing corrosion and discharge penalties while increasing production.

**AEPC Thermal** is a division of Apex Engineering Products Corporation (AEPC). Our mobile waste conversion plants are trailer mounted and ready for deployment!

#### 1241 Shoreline Drive Aurora, Illinois 60504 T: 630.820.8888 | 800.451.6291 | F: 630.820.8886 | MADE IN THE USA

**Apex Engineering Products** has been formulating and manufacturing safe and biodegradable specialty cleaning chemicals for a diverse range of applications around the world. From our **RYDLYME** biodegradable descaler to our versatile **RYDALL** line of degreaser/ cleaner, odor control and water treatment products, we aim to decrease downtime and increase efficiency.

We are a fourth-generation, family-owned company acclaimed not only for our biodegradable line of products, but also our in-depth and exceptional customer support. With decades of knowledge and experience in a wide array of applications, our professional technicians will work closely with you to determine the best solution for your facility's unique challenges.

Apex Engineering Products also takes great pride in being an ISO 9001 Certified Company providing the highest level of support and quality of products to our customers...another formula that hasn't changed in nearly 80 years!