

APEX

QUARTERLY

THIRD QUARTER 2023

IN THIS ISSUE:

USING *RYDLYME* TO DESCALE BOILERS -
AVOID CRITICAL SHUTDOWNS IN THE COLD!

RYDALL HD - BIODEGRADABLE HEAVY DUTY
DEGREASER!

RYDLYME DESCALES A COOLING
TOWER AND HEAT EXCHANGER!



NEWS ON SAFE
CHEMICAL SOLUTIONS
FROM APEX ENGINEERING
PRODUCTS CORPORATION



Watch a boiler descaling video!

Descaling Boilers

Colder weather is around the corner, don't wait to clean your boilers!

RYDLYME Descaler for Boilers

Accumulation of scale along the water surfaces of boilers and within their tubes can significantly impair the heat transfer efficiency of the boiler. This undesirable scale buildup can comprise various mineral deposits, including rust, calcium, and limescale, among others. Several factors contribute to the formation of these unwanted insulating deposits, including operational hours, feed water hardness, operating temperatures, and the maintenance and treatment of the boiler.

Therefore, it is imperative to establish a proactive maintenance regimen that incorporates the use of **RYDLYME**, a biodegradable descaling solution, and a convenient, portable **RYDLYME** Pumping System.

RYDLYME descaler is an easy to use, safe, and highly effective tool for dissolving these deposits. An annual cleaning, or more frequent intervals based on the aforementioned factors, using **RYDLYME** will dissolve calcium, limescale, rust, and other mineral deposits into a solution without causing harm to the metallurgy or components within your boiler. **RYDLYME** is safe for personnel performing the cleaning, and



disposal is straightforward, as **RYDLYME** descaler is readily biodegradable. Simply dispose of the used solution into the regular plant sewer (according to your local regulations).

To illustrate the importance of this maintenance, consider that a mere 3/16-inch thick scale can result in the boiler consuming 27% more fuel! Furthermore, allowing this scale to accumulate within the boiler tubes can significantly diminish the boiler's lifespan. Scale is inherently corrosive to the tube material, slowly eroding the tube walls over time. By consistently maintaining your boiler with **RYDLYME** biodegradable descaler, you can minimize scale buildup, corrosion, and ultimately extend the equipment's lifespan while improving its efficiency.

Boiler Tube **RYDLYME** Descaling Procedure

Apex Engineering Products has been manufacturing safe chemical solutions for over 80 years, so we are familiar with all shapes, sizes and boiler configurations. The procedure outline below is brief and simple for most boiler cleanings.

1. Shut down boiler.
2. Blow down with pressure still on.
3. Drain and flush unit.
4. Close steam valve.
5. Add **RYDLYME**, and then top off with water.
6. Circulate through the drain or low point and return from the pressure relief valve or high point of the boiler back to a vented container.
7. Circulate for 4-8 hours depending on volume.
8. Open steam valve.
9. Drain, flush, re-fill and start up.

For detailed instructions please visit our website or contact our technical staff for assistance.



RYDALL **HD**

BIODEGRADABLE Heavy Duty Degreaser TM

Safe.

Heavy Duty.

Degreaser.



**APEX
ENGINEERING
PRODUCTS
CORPORATION** TM

HOTEL COOLING TOWER & HEAT EXCHANGER CLEANING

A beach side hotel was experiencing scale issues within their cooling tower and heat exchanger. After inspection, the main culprit was water scale that had accumulated within the plate & frame exchanger as well as the cooling tower fill. The cooling tower water had only 6° ΔT, the heat exchanger was achieving a 13° ΔT.

Circulating 100 gallons of **RYDLYME** through the system for 8 hours solved their cooling problem. After a water flush, the cooling tower & heat exchanger were returned to service. The cooling tower now had a 10° ΔT which was a 66% increase and the heat exchanger had a 28° ΔT which was a 115% increase! The hotel personnel were amazed at the difference! With the dramatic improvement in efficiency, the hotel was convinced to have **RYDLYME** as a preventative maintenance program for future cleanings! The cleaning tech walked in to a round of applause now that the A/C was fully operational for the summer season!



CHALLENGE

Water scale was creating cooling issues in a cooling tower & heat exchanger at a beach side hotel.

SOLUTION

Circulating 100 gallons of **RYDLYME** was circulated for 8 hours with a water flush after the **RYDLYME** cleaning was completed.

RESULTS

After the **RYDLYME** cleaning, the ΔT in the cooling tower increased 66% and the ΔT in the heat exchanger increased 115%!

DESCALER & 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



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.

ODOR CONTROL & WATER TREATMENT



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 H₂S, COD, BOD, FOG, TDS and TSS. Thereby reducing corrosion and discharge penalties while increasing production.



BUCKED SCENT ELIMINATOR is born and bred from our industrial products, BUCKED is designed to eliminate the scent hunters carry in order to be invisible!

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 over 80 years!**