CONTENTS

Inland Empire Paper Co., in Spokane, Wash., implements Siemens MBBRs to meet discharge limits. *(Photo courtesy of Inland Empire Paper Co.)* *See page 10.*

The Need for Gas Feed 04
Chlorine disinfection aids flour and other milling applications

Refining Refinery Water 06
Facility's MBR system supports wastewater reuse

Leak Detection Unplugged 08
Industrial company pinpoints force main leaks using acoustic technology

Pulp & Paper Project 10
MBBR technology helps mill meet effluent discharge limits

Products + Services 13

iWWD
Industrial Water & Wastes Digest

March/April 2012 Vol. 1/No. 2
847.391.1000 ■ F: 847.390.0408
www.wwdmag.com

EDITORIAL STAFF

Editorial Director	Neda Simeonova
Managing Editor	Elizabeth Lisican
Associate Editor	Kate Cline
Associate Editor	Mary Beth Nevulis
Designer	Dan Soltis

MANAGEMENT

Vice President/ Group Publisher	Dennis Martyka dmartyka@sgcmail.com
Associate Publisher	Greg Tres gtres@sgcmail.com
VP Custom Publishing & Creative Services	Diane Vojcanin
VP Events	Harry Urban
VP Information Technology	Joel Hughes
Director of Audience Development	Doug Riemer
Director of Creative Services & Promotions	Sandi Stevenson

CORPORATE

Chairperson	K.S. Gillette
President/CEO	E.S. Gillette
Sr. Vice President	A. O'Neill
Sr. Vice President, CFO	Dave Shreiner
Chairman Emeritus	H.S. Gillette (1922-2003)

ADVERTISING & SALES

7150 E. Camelback, Suite 325
Scottsdale, AZ 85251
480.941.0510 • fax: 480.423.1443

Integrated Media Consultant	David Rairigh drairigh@sgcmail.com (phone x25)
Integrated Media Consultant	Fred Ferris fferris@sgcmail.com (Arlington Heights office, 847.391.1003)
Integrated Media Consultant	John Rogier jrogier@sgcmail.com (Arlington Heights office, 847.391.1053)
Integrated Media Consultant	Celeste Scarfi cscarfi@sgcmail.com (phone x12)
Classified Sales Manager	Donna Aly daly@sgcmail.com (phone x13)
Reprint Coordinator	Adrienne Miller amiller@sgcmail.com (Arlington Heights office, 847.391.1036)
List Rental Contact	John Ganis 914.368.1024
Advertising Coordinator	Erica Rivera erivera@sgcmail.com (Arlington Heights office, 847.391.1049)

A supplement to:

WATER & WASTES DIGEST · PLANT ENGINEERING · CONTROL ENGINEERING · CONSULTING-SPECIFYING engineer

EDITORIAL

Planting the Seed

The mild winter we've been experiencing across the U.S. has made the season fly by, and all of a sudden it's time to think spring. No complaints here. As the cliché goes, spring gives way to rebirth; therefore, what better way to get into the spirit than to start brainstorming?

The world of industrial wastewater is alive with exciting updates. Engineers from Brown University, for example, announced they have developed a system to cleanly and efficiently remove trace heavy metals from water. This is uplifting news for combating this detrimental consequence of industrial processes—typically a costly and time-consuming battle. The method, dubbed the cyclic electrowinning/precipitation system, reportedly removes up to 99% of copper, cadmium and nickel, returning contaminated water to federally accepted standards.

Speaking of regulations, the U.S. EPA is busy with its study on the impact of the controversial practice of hydraulic fracturing on drinking water resources, and the drivers of that impact. President Obama proposed $14 million toward this study in his spending plan for 2013. Factoring in the increasing concern over water pollution as a whole, industrial operations are realizing the importance of keeping up with the times.

Innovative thinking will sow the seeds of future sustainable, responsible industrial wastewater management. This issue of *iWWD* highlights some noteworthy technologies, such as acoustic leak detection advancements and moving-bed biological reactors that improve wastewater treatment system performance. We also explore disinfection processes for milling applications.

As always, please feel free to e-mail your thoughts on new trends and other industrial topics on your mind; and tell us what you would like to see more of inside these pages.

Elizabeth Lisican

Elizabeth Lisican, Managing Editor
elisican@sgcmail.com