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MBR Modules. See page 4.
(Photo courtesy of PERC Water Corp.)

Scranton Gillette Communications
 3030 W. Salt Creek Ln., Ste. 201, Arlington Heights, IL 60005-5025
 tel: 847.298.6622 • fax: 847.390.0408 • www.wwdmag.com

EDITORIAL STAFF

Editorial Director	Neda Simeonova
Managing Editor	Caitlin Cunningham
Associate Editor	Elizabeth Lisican
Associate Editor	Kate Cline
Associate Editor	Leslie Streicher
Designer	Elena Mengarelli

ADVERTISING & SALES

7150 E. Camelback, Suite 325 • Scottsdale, AZ 85251
 tel: 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)

MANAGEMENT

Vice President/Publisher	Dennis Martyka dmartyka@sgcmail.com
Associate Publisher	Greg Tres gtres@sgcmail.com
VP Custom Publishing & Creative Services	Diane Vojcanin
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Membrane Care



Membranes are not install-and-forget solutions. These investments warrant consistent, specialized monitoring and maintenance. And given the proper care, they are likely to return the favor with full-power performance over a long lifetime.

Much like plaque can clog our arteries and reduce blood flow, insoluble contaminants can build up in membrane pores, hindering water flow and the purification process. Even with pretreatment and chemistry controls in place, membrane facilities are wise to develop and adhere to a comprehensive monitoring and maintenance program that protects their technologies and, ultimately, water quality.

Knowledge is power: Read up on the category and brand of membrane technology selected (e.g., its permeability, foulants of particular concern, life expectancy and service requirements). Then consider this information in relation to the application at hand (e.g., its feedwater quality, flow rate, recovery percentage and manpower) to optimize design and operation.

Once the technology is in place, call in the experts to install a tracking program or to conduct regularly scheduled inspections. Establish a customized cleaning routine as well, and follow through on it. In many cases, clean-in-place systems can help keep this regimen manageable.

Preserving membrane technology is a worthwhile priority. Monitoring and maintenance best practices help protect big-ticket infrastructure, preventing irreversible damage that can trigger performance headaches, reduce life span, drain budgets and jeopardize water quality.

How does your facility keep tabs on and care for its membrane technology? What design, operation, monitoring and maintenance tips and tricks can you offer your peers? The *Water & Wastes Digest* editorial staff welcomes your comments and questions at wwdeditor@sgcmail.com.

Caitlin Cunningham, managing editor
ccunningham@sgcmail.com