

CENTRAL STATES WATER

The Official Magazine of the Central States Water Environment Association, Inc.

2010 Buyers' Guide

Central States Water Environment Association
3809 Sherandoah Dr. Crystal Lake, IL 60012
ADDRESS SERVICE REQUESTED



PLANT PROFILE



Albert Lea



One of two 32 MG tanks for the City of Syracuse, NY; Engineering by CH2M HILL

When we broke ground on these tanks in Syracuse, it was sunny... But then, New York weather changes day to day

Good thing weather doesn't slow DYK construction crews down. So, whenever you are ready to break ground, your tank will be built on time to the quality standards DYK is known for.

- Water storage, wastewater or thermal energy storage tanks from 100,000 gallons to 40,000,000 gallons
- Buried or disguised
- Architecturally treated or plain

All built to last for over 100 years with little to no maintenance. Owners in New York recently trusted DYK with 94.0 MG of their water. How many gallons can we store for you? Sunny weather not required.

Photography: Reese, Syracuse, NY



Call us today 1-800-227-8181 or visit www.dyk.com

DYK
INCORPORATED
Building Lifetimes of Value Today



Continuing Education Courses for Water and Wastewater Professionals

Essentials of Hydraulics for Civil Engineers and Designers

October 26–27, 2010, Madison, WI

- Practical problem-solving workshops
- Pipe flow, open channels, groundwater, pumping
- Wastewater, stormwater, drinking water applications

Practical Economics and Financial Methods for Civil Engineers and Managers

October 28–29, 2010, Madison, WI

- Present worth calculations, payback periods, life cycle costs
- Balance sheets, income statements, accounting principles
- Financial management, bond issues, ratings

Water Reclamation and Reuse: Issues, Technologies, and On-site Applications

November 16–17, 2010, Madison, WI

- Practical trends, regulations, and case studies
- McGraw-Hill hardcover text WATER REUSE included
- Presented by Prof. George Tchobanoglous, Dr. James Crook, others

Managing Energy in Wastewater Facilities: Practices, Trends, and Technologies

November 18–19, 2010, Madison, WI

- Cost savings in treatment, pumping, and biosolids
- Emerging technologies for small and large plants
- Case studies from across the U.S.

Sanitary Sewer and Collection System Engineering

December 7–9, 2010, Madison, WI

- Pipe materials, peak flows, hydraulics, modeling
- Regulations, overflows, CMOM programs, costs
- Corrosion, odors, lift stations, rehab methods

See complete course listings at

epd.engr.wisc.edu

To enroll or find out more:

Ned W. Paschke PE

paschke@engr.wisc.edu

Toll free 800-462-0876 or

608-263-4705

Building Infrastructure. Building Trust.

Consulting & Engineering for Water and Wastewater

Today and every day, Foth is building trust by delivering personalized, client-centered service. We delve deeply into all aspects of your project so that we can ask the right questions and find the right answers. We work with you in ways that will help grow and sustain your local community. For all your wastewater and municipal engineering needs, contact Foth.



www.foth.com ♦ 1-800-236-8690

♦ Green Bay ♦ Madison ♦ Milwaukee ♦ Des Moines
♦ Cedar Rapids ♦ Champaign ♦ Minneapolis



FEATURES

Transitioning Success	23
Plant Profile: Albert Lea	28
Youthful Apprenticeship	33
Submit for an Award	44
Benefits of Membership	47
Industry News: Wastewater Diving	49
2010 Buyers' Guide	51



DEPARTMENTS

Messages

President's Message	7
Executive Director's Message	10

CSWEA News

Call for Papers for the 84th Annual Meeting	14
CSX Review	18
MWIE Preview	20
Operations Challenge	26
Calling Young Professionals	31
Government Affairs Report	40

Section News

Illinois Chair Message	55
Wisconsin Chair Message	56
Minnesota Chair Message	57

Published by:



Tel: (866) 985-9780 / Fax: (866) 985-9799
www.kelman.ca

Managing Editor: Cheryl Parisien, cheryl@kelman.ca
Design/Layout: Jackie Magat
Advertising Sales: Al Whalen, awhalen@kelman.ca
Advertising Co-ordinator: Lauren Campbell
Federal tax# 23-7378788

©2010 Craig Kelman & Associates Ltd.
All rights reserved. The contents of this publication, which does not necessarily reflect the opinion of the publisher or the association, may not be reproduced by any means, in whole or in part, without the prior written consent of the publisher.

Central States Water, the official magazine of the Central States Water Environment Association, Inc., is published four times per year. Send comments, news items, gloss photographs or digital images to Eric Lecuyer, cswea@ymail.com

Send undeliverable addresses to: CSWEA, 3809 Shenandoah Dr., Crystal Lake, IL 60012

President

Jim Miller
Foth I&E LLC, Eagle Point II
612-961-2505
jim.miller@foth.com

1st Vice President

Beth Vogt
Greeley and Hansen
312-578-2321
bvogt@greeley-hansen.com

2nd Vice President

Randy Wirtz
Strand Associates, Inc.
608-251-4843
randy.wirtz@strand.com

Treasurer

Douglas Henrichsen
Brown and Caldwell
651-468-2077
dhenrichsen@brwnclad.com

Immediate Past President

Ralph B. (Rusty) Schroedel
AECOM
920-912-1227
rusty.schroedel@aecom.com

WEF Director '12

Dave Raby
Howard R. Green Company
Court International Building
651-644-4389
draby@brgreen.com

WEF Director '11

Scott Trotter
Trotter & Associates
630-587-0470
s.trotter@taiengr.com

PWO Representative '11

Charlie La Rocco
City of Elmhurst
630-688-2003
charles.larocco@comcast.net

YP Representative '10

Rich Hussey
LAI Ltd.
847-392-0990
rich@leyassociates.com

Illinois State Section Trustee '12

Gary Scott
Glenbard Wastewater Authority
630-790-1901
gscott@gbww.org

Minnesota State Section Trustee '12

John Glatzmaier
CH2M HILL
651-365-8526
john.glatzmaier@ch2m.com

Wisconsin State Section Trustee '11

Tom Sigmund
Green Bay MSD
920-438-1095
tsigmund@gbmsd.org

Executive Director

Eric R. Lecuyer
CSWEA
815-954-2714
cswea@ymail.com



This magazine is printed with vegetable oil-based inks and consists of recycled paper provided by a Forest Stewardship Council (FSC) certified supplier. Please do your part for the environment by reusing and recycling.



T H I N K G R E E N



It's not just the purchase. It's the service after the sale. It's the Flygt difference.

When it comes to the finest Flygt products and services, your best source by far is ITT. Our pumps, mixers and aerators have long set the industry standard. Plus, that same Flygt quality extends to system monitoring and control, bypass and dewatering equipment, and all kinds of retrofits.

But we're not just about impeccable product quality alone. In fact, the key to the Flygt difference is the service and support we provide long after the sale has been made.

For consulting engineers and plant operators, your stream of Flygt advantages begin with state of the art product design and innovative engineering. What's more, our products are delivered by teams of experienced professionals. Their expert system design ensures that our products are paired most efficiently with your specific applications.

Along the way, we offer the industry's largest network of skilled service facilities, so onsite help is nearby and ready 24/7, should you ever need it.

For over 50 years, Flygt Products have been acknowledged as the industry leader in America. It's no accident. The Flygt difference is this: We stand by our products and our customers.

For full details on what Flygt can do for you, contact your Flygt Product salesperson in WI: 262-544-1922, fax 262-544-1399, ITT Water & Wastewater Flygt Products
N27 W23291 Roundy Drive,
Pewaukee, WI 53072
or in IL: 708-342-0484; Fax 708-342-0491
ITT Water & Wastewater - Flygt Products
8402 West 183rd Street, Ste. A,
Tinley Park, IL 60477
Visit us at: www.us.ittwww.com



Engineered for life





ELEMENTS OF YOUR SUCCESS

Vision. Value. Passion. Integrity. Relationships. Attitude.

These elements make up the structure of AE2S. What does that mean to you? Extreme client service, trusted relationships, a shared vision for your future, and passion for every project. They all translate into your success.

Advanced Engineering and Environmental Services, Inc. (AE2S) Offices:

Minneapolis Moorhead
Bismarck Fargo Grand Forks Williston
Great Falls Kalispell
www.ae2s.com

WATER ENGINEERING
MUNICIPAL ENGINEERING
LAND DEVELOPMENT
SURVEY/MAPPING/GIS
FINANCIAL/ASSET MANAGEMENT
INSTRUMENTATION & CONTROL
ELECTRICAL ENGINEERING



Get Active

By Jim Miller



I was looking back at Rusty's comments from last year to gain some momentum in putting together my remarks for this column and found the common recurring theme: "get active." This seems to be what all of us on the board have done – we have all taken an active role in serving our members through various means within the

organization. But where and how did we become active? As many of you know, my involvement with the Operations Challenge since its inception was a key to my becoming more active in the organization.

The Operations Challenge has touched a growing number of members since the early days of meeting one's

"My challenge is to you, our members to let your state section officers and executive board members know what is important to you and how we can do a better job."



teammates on the steps of the exhibition hall. Our collection and operations award recipients are encouraged to become involved and participate on the teams and the backing of not only their employers, but the vendors who have stepped up with contributions of funding or technical assistance have broadened the area of involvement to many who would not otherwise have gotten active. Our present Executive Board has a number of former Challenge team members now in key roles in the association. This has been one great way to get more people involved and active – but we need to work harder to find even more ways for our members to take an active role in our industry. I have set goals to look for added opportunities whether during the Annual Conference or other specialty conferences to provide avenues for involvement and activity.

The association held its annual CSX session in July and I noted that while we had a reasonable interaction and exchange of information, we need to get more committee chairs to attend to ensure we are getting the programs and information out to our members that they need. My challenge is to you, our members to let your state section officers and executive board members know what is important to you and how we can do a better job.

The board held a special teleconference meeting on August 23 to fill a vacant position and to consider ratification of a memo of understanding

(Continued on page 8)

(Continued from page 7)

with our co-sponsors of the Midwest Water Industry Expo. This MOU is an example of the need to define roles we play in interaction with other partners when providing educational opportunities for our members and the industry. State sections are also working on setting benchmarks and MOUs for other co-sponsored events. Our dynamic industry has a number of other players that are basically trying to do the same things we are and when we can work together everybody wins and our efforts can see higher returns. By the way, congratulations to Dan Lynch who was confirmed by the Executive Board to fulfill the remaining year of Scott Trotter's director term. Oh, by the way, Scott will be serving on the WEF Board of Trustees as our direct representative to WEF. Congratulations to both Dan and Scott.

By the time you are reading this, WEFTEC will have been wrapped up. I would like to thank all the vendors who helped to make the CSWEA Reception a success and also thank those who represent CSWEA through the Operations Challenge and those award recipients from our organization. I spent some time with Loren Larson from SunOpta Ingredients who represented his firm in accepting the Industrial Achievement Award. I will

also be "re-presenting" the award in the hometown location of Cambridge, MN before their local city council and press. It is really great to have the privilege to recognize one of our partners in this business for the great things that they have accomplished to protect our environment. Daniel Noguera was also recognized at this year's WEF award ceremony for his efforts in the educational field. I would also like to thank our student paper representative Megan Corrado (UW Madison) and the student design team, Ian Bradley, Anthony Straub, Paul Forwarski and Alyssa Sohn (U of I) who also represented CSWEA at the WEFTEC event.

I started out this article pointing out the continued need to become active or involved and will end on the same point. We need to constantly look at what the needs are for our current and future members for our organization to be and remain effective. A great way to have a direct impact on those efforts is to simply get involved. Join a committee, send a letter or email to your state section officers, make a call, but please don't just sit back and hope that someone will come up with something. If you do become active it will be appreciated and you will know that you became part of a great organization. **CS**

MAXIMIZE THE IMPACT OF YOUR MWIE EXHIBIT

The 2010 Midwest Water Industry Expo will be held February 8-9 at the Kalahari Resort in Wisconsin Dells, WI.

If you are exhibiting at this outstanding marketing event, being part of the show-guide for this event in the Winter issue of *Central States Water* is a must!

BY ADVERTISING YOU REACH DELEGATES AT THE SHOW PLUS ALL OF THE MEMBERS WHO DO NOT ATTEND!!!

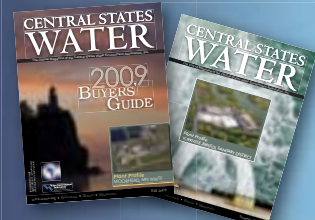
Your advertisement will appear in this Winter show-guide issue of *Central States Water* which is mailed out well in advance of the show. (Deadline Nov. 12th)

Advertise in this issue as a 1/4 page or larger and you will receive:

- An enhanced exhibitor listing (25 word write-up)
- A great looking display stand to showcase at your booth showing your support for the association's publication (Will be dropped off at your booth)
- Unbelievable exposure prior to the event & Bonus Distribution at the show (*Central States Water* will be made available to attendees and will be handed out to all exhibitors)

CENTRAL STATES WATER

The Official Magazine of the Central States Water Environment Association, Inc.



For more information, please contact:
Al Whalen, Advertising Sales Manager
866-985-9782 awhalen@kelman.ca

BOLTON & MENK, INC.
Consulting Engineers & Surveyors



St. Peter, MN Wastewater Treatment Facility:
Council of Engineering Companies (CEC) Grand Award (2004),
Minnesota Society of Professional Engineers (MSPE) 2004 Seven Wonders of Engineering Award

Engineering in Civil, Water, Wastewater, Transportation,
Water Resources and Surveying Services.

507-625-4171 www.bolton-menk.com
Eight offices serving the upper midwest

DESIGNING FOR A BETTER TOMORROW





Resilient Wedge Gate conforms to host pipe

You asked for it. We delivered: **EZ₂TM Technology**

- ✓ **1 Hour (or less) to Install**
(16" size installed in under 4 hours)
- ✓ **EZ₂TM Valve Insertions or Line Stops –**
(1 machine, 2 Functions)
- ✓ **Meets AWWA material specs C-509-01**
and C-509-09

Plus...

- **Single excavation performance**
- **Standardized operation** - normal turns to actuate valve
- **Compact design**
- **Pipe-line integrity maintained**
- **Lightweight and compact installation equipment**
- **No service interruption** - process is completed under pressure
- **Sizes available for 4 inch through 16 inch systems and**
A/C pipe sizes

Tuberculated Pipe? No problem!

EZ₂TM Patented Resilient Wedge Gate is designed to work with both perfect and irregular I.D.s.

New Pipe, Old Pipe, Any Pipe!

Simple, Easy and Economical beats Complicated, Difficult and Expensive Every Time.

Call for complete system details and to learn how you can start saving time and money.

Advanced Valve Technologies, Inc.

Headquarters

800 Busse Road
Elk Grove Village, IL 60007

Plant 2

12601 Homan Avenue
Blue Island, IL 60406

**Call today for complete
EZ₂TM Valve information!**

877.489.4909

www.avtfittings.com

Ch-Ch-Ch-Changes

Eric R. Lecuyer



We in the world of CSWEA and WEF are undergoing some amazing and somewhat unexpected changes. Change is never easy and we are often threatened with the unknown, which can cause anxiety, paralysis, speculation and, my favorite, rumors.

The most startling change for me came about when WEF Executive Director Bill Bertera announced that he will be leaving his position at the end of the year. I have come to know Bill well during his tenure at the helm of WEF and have learned much from him and his wise and steady leadership. Bill has navigated WEF through some interesting times, a unsuccessful attempt to become more formally associated with AWWA, the first significant and meaningful change in the governance process of WEF and an economic downturn that has resulted in some non-profits going out of business. I have been proud to include his messages in the pages of *Central States Water* and his thoughtful discourse often left one pondering a deeper meaning and a greater enthusiasm for what could be possible – things like “one voice for water.” In a calm demeanor and often leading the conversation of matters of interest to member associations and our relationship with WEF, Bill would often transform a complaint into a solution. I will miss the time and access we have with Bill and look forward to a different future with a different Executive Director at the helm of WEF. Ch-Ch-Ch-Changes!

As reported elsewhere in this issue of *CS Water*, Ch-Ch-Ch-Changes

have come to the CSWEA Executive Committee as well with the elevation of our own Scott Trotter to serve on the WEF Board of Trustees. The WEF Board of Trustees is the group that along with the WEF president and officers runs the day-to-day business of WEF, a major multi-million dollar international non-profit association. In order to accept this appointment, Scott had to resign from his post on our Executive Committee as our “junior” delegate to WEF. Pursuant to the by-laws, the Executive Committee elected a replacement, Dan Lynch, to complete Scott’s term. The wisdom of this selection is obvious; Dan was slated to leave the Executive Committee following the “first” meeting of the WEF House of Delegates at WEFTEC and be succeeded by our WEF Delegate elect Dave Raby. As a freshman delegate, Dave would have been mentored by Scott, who would become our Senior WEF Delegate. By having Dan serve out the remainder of Scott’s term, continuity is provided to CSWEA and Dave will receive the mentoring, background information and guidance needed to be an effective delegate to WEF and liaison to CSWEA. Our next regularly elected WEF delegate will come from the Wisconsin Section and the nominating committee is charged with providing a nominee for election to this post at our next Annual Business Meeting at the 84th Annual Meeting in Brookland, MN. Congratulations to Scott on his appointment to the WEF Board of Trustees and our thanks to Dan for his continued service to CSWEA and WEF. In this case the more things change, the more they stay the same.

Sadly, another change is the passing of Bob Roskopf, long time CSWEA member from the Minnesota Section and a past Treasurer of WEF. While I didn’t know Bob well, we spoke often when he was able to attend our Annual Meetings and his kindness and gracious manner was remarkable. Upon word of his passing, there were an amazing number of emails between our members recalling how he helped so many of our members with their careers and it was an honor to be part of the email string sharing memories and anecdotes of Bob’s life. Bob was a great man who will be missed by many and a person who has provided a fine example of courage and grace for us all to follow.

Another Ch-Ch-Ch-Change is the recent announcement that Past President and avid supporter of CSWEA Sam Claassen’s appointment to the position of President and CEO of SEH, Inc. The last time I saw Sam he was having the time of his life at our 83rd Annual Meeting, singing and dancing along with many other CSWEA friends at our Rock Star Gomeroke event. Anybody need video? Drop me a line. Congratulations Sam! [CS](#)

CORRECTION:

In the Summer issue of *Central States Water* we misspelled the name of the Laboratory Analyst Excellence Award winner. Our apologies to Judy Tholen.



Global Technologies, Local Solutions.



Degremont Technologies offers trusted, globally proven solutions for your water treatment challenges.

HEADWORKS
BIOLOGY
SEPARATION
MEMBRANE
DISINFECTION
BIOSOLIDS
SYSTEMS



www.degremont-technologies.com



Problems In Your Sewers? Too much I/I causing surcharging?
Broken pipe pieces blocking flow? Roots clogging the connection?
Too much grease stopping flow?

But you can't do anything because the problems come from private lateral lines?

Visit the Private Property Virtual Library (PPVL) to see what other utilities
with successful private property programs are doing:

www.wef.org/PrivateProperty

Read program summaries. Download examples. Get peer contact information.



Developed by the WEF Collection System Committee

**BIOGAS
SHAND & JUR'S**

Digester Gas Safety Equipment

Expanda-Seal® = Innovation = Conservation



With over 90 years of proven experience, L&J Technologies' Shand & Jurs Biogas represents the industry's standard for quality and innovation for Digester Gas Safety Equipment. Our unique patented Expanda-Seal™ technology is designed to reduce digester gas emissions from relief devices, ultimately reducing odors and preventing flammable vapors.

Expanda-Seal™ ensures 0.5 SCFH or less of leakage up to 95% of the set point.



www.sandj.com



CENTRAL STATES WATER ENVIRONMENT ASSOCIATION 84th ANNUAL CONFERENCE

May 16-19, 2011 | The Northland Inn | Brooklyn Park, MN

Save the date

Planning for the 84th Annual Conference is well under way. Plan to arrive in Brooklyn Park on Monday, May 16 for an afternoon of golf and to catch up with friends and associates at the Meet and Greet.

Tuesday, May 17 will kick off with our General Opening Session and the first full day of the conference is packed with activities including the keynote address, three parallel tracks of technical sessions, a full day of exhibits, winding up with evening social event.

Wednesday, May 18 opens with the State Section breakfasts and another full slate of technical sessions, plus exhibits will again be open in the morning. The Association Luncheon will feature good food and recognition of our members. Wind up the day at Annual Awards Banquet.

Thursday May 19 we say goodbye to another conference with the Farewell Breakfast.

The Central States Annual Conference is great event. Come and enjoy the Northland Inn and explore the beautiful Twin Cities area.

Rotary Lobe Pumps
Macerating Technology

BÖRGER
innovation

Rotary Lobe Pumps in the Wastewater Industry!

Technical Features:

- Self-Priming, Valveless, Positive Displacement
- High Capacities up to 5,000 usgpm
- Minimal Life Cycle Costs



Boerger Representatives:

Boerger, LLC | (877) 726-3743 | www.boerger.com



Matthew Fritze | 651.777.4041
Minnesota | www.engamerica.com



Craig Soling | 847.230.0749
Illinois | cesoling@gmail.com

Mulcahy/Shaw Water, Inc.

Rich Knoelke | 262.241.1199
Wisconsin | www.mulcahyshaw.com



CALL *for* PAPERS

for the CSWEA 84th Annual Meeting

This is a solicitation for abstracts of papers to be considered for presentation at the 84th Annual Meeting of the Central States Water Environment Association, Inc., which will be held May 16-19, 2011 at the Northland Inn, Maple Grove, MN. To receive consideration, abstracts must be submitted to the Technical Program Committee **by December 7, 2010.**

As a part of the technical program in 2011, as in past years, we hope to offer concurrent sessions of papers dedicated to specific topics associated with wastewater collection and treatment. Topics of special interest for the 2011 technical program include:

- Automation/Instrumentation & Control/Information Management
- Biosolids Management and Environmental Management Systems
- CMOM Program Development and Implementation
- Collection System Design and Operation
- Energy Conservation, Production and Utilization, Sustainability in Design and Construction
- Industrial Treatment, Pretreatment and Pollution Prevention
- Infiltration/Inflow Management
- Laboratory Issues
- Management Issues
- New/Innovative Technology Research and Application
- Non-Point Pollution – Sources and Management
- Nutrient Removal and Management
- Wastewater Treatment Operations, Process Control, Optimization and Start-up Issues
- Regulatory Issues
- Security Issues
- Solids Handling/Biosolids Treatment & Stabilization
- Stormwater and Combined Sewer Overflow (CSO) Management
- Toxics/Emerging Pollutants Monitoring and Control
- Treatment Design Issues and Considerations
- Wastewater Reuse Applications, Technology and Regulatory Issues
- Water Quality/Watershed Management Issues and Initiatives

The Technical Program Committee is particularly interested in operations-oriented papers and case studies. Papers on other subjects which you feel may be of interest to members are, of course, also welcome. All written papers submitted are eligible for the Radebaugh Award.

To receive consideration, please submit an electronic copy (via email or CD) of your abstract to the Technical Program Committee, care of Jason Benson, to the address below, by **December 7, 2010.** Please refer to the contact information below for additional information. An electronic version of the instructions for submission of abstracts and the **Abstract Information Sheet** which should be submitted with your abstract can be downloaded from the CSWEA website, or please send me an email and I can forward it to you. Thank you!

JASON BENSON, Chair, Technical Program Committee, AE2S

6901 East Fish Lake Rd, Suite 184, Maple Grove, MN 55369

Email: Jason.benson@ae2s.com | Phone: (612) 280-2273 | Fax: (763) 463-5037



Instructions for the submission of abstracts and criteria for paper selection annual meeting

The CSWEA Technical program Committee has the responsibility for technical sessions at the Annual Meeting. Participants in any sector of the water environment field are cordially invited to submit abstracts for evaluation. The basis for selection will be the excellence of the abstracts as judged by the committee.

Abstracts should be between 250 and 500 words in length. The abstract should be submitted electronically (double-spaced) to the Technical Program Chair whose name and address are shown on the Abstract Information Sheet. In order for an abstract to be considered by the Technical program Committee, the Abstract Information Sheet, which serves as the cover page of each of the abstracts, must be included with the abstract. The total number of abstract pages, including tables and figures, should not exceed six (6).

The presenting author of each abstract will be notified in February of the acceptance or rejection of the abstract.

The following should serve as a guide in the preparation of the abstract.

1. Originality and status of subject:

The paper should deal with new concepts or with new and novel applications of established concepts. It also may describe substantial improvements of existing theories or present significant data in support or extension of those theories. Broad studies of ill-defined problem situations should be avoided. Previously published data should be introduced only in summary form and for comparative or supportive purposes.

The abstract should substantiate that the project has been fully developed, that the theory or experimental procedure has been firmly established, and that data have been collected and subjected to analysis. It should be evident that the abstract clearly describes the entire content of the paper to be presented.

2. Technical content:

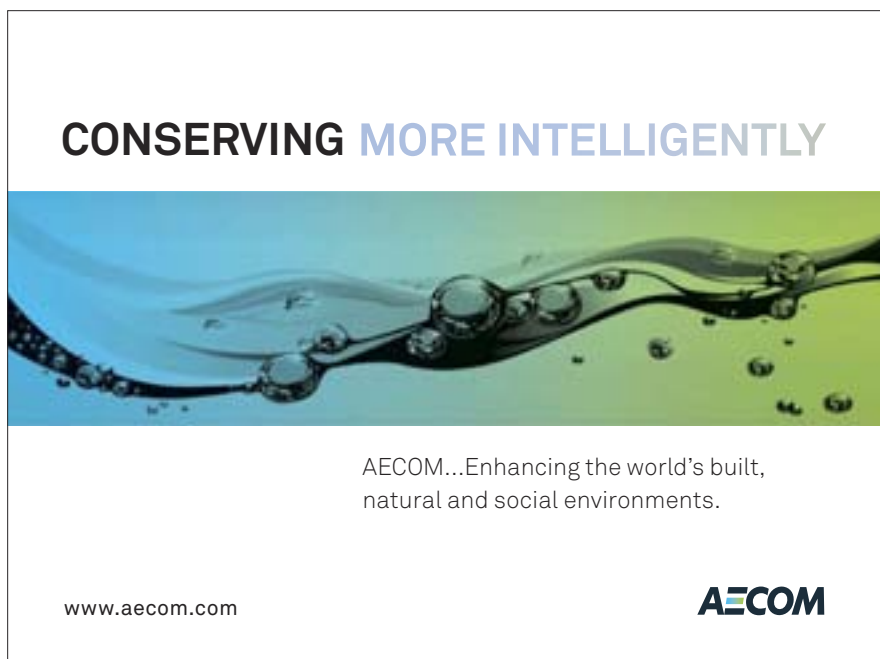
The conditions under which data were obtained should be presented along with the methodology used. The conclusions presented should follow directly from the investigation conducted.

3. Water environment significance:

The paper should relate clearly and significantly to the water environment field. Papers of a truly fundamental scientific nature are desired, but the author should make evident the relationships of the work to a practical problem area or situation in water quality and wastewater control.

4. Adequacy of abstract preparation:

Recognizing the adequacy of an abstract is indicative of the probable quality of the final paper. Authors are urged to prepare their abstracts with care. Objectives, scope, and general procedures should be included insofar as the limited length of the abstract permits. An indication of conclusions is desirable. [CS](#)





Abstract Information Sheet

Paper title: _____

Author(s), title, affiliation, & address: (underline person presenting paper):

Will this or similar work have been presented or published elsewhere by the time the Annual Meeting is held? ☐ Yes ☐ No

If yes, where? _____

An electronic copy of the abstract should be forwarded to:

JASON BENSON

Chair, Technical Program Committee, AE2S

6901 East Fish Lake Rd, Suite 184, Maple Grove, MN 55369

Telephone: 612-280-2273 | Fax: 763-463-5037 | E-mail: Jason.benson@ae2s.com

For the use of the Technical Program Committee: Rating* Remarks

1. Originality & Status of Subject	_____	_____
2. Technical Content	_____	_____
3. Water Environment Significance	_____	_____
4. Adequacy of Abstract Preparation	_____	_____
TOTAL POINTS	_____	_____

* 5 = Excellent
4 = Good
3 = Average
2 = Fair
1 = Poor



Howard R. Green Company

Water/Wastewater Services

- Preserving our natural water resources with **state-of-the-art** solutions
- Bringing **experience** and **innovation** to public and private projects
- Striving for a **cleaner, safer** future

Court International Building | 2550 University Ave W, Suite 400N | St. Paul, MN 55114
651.644.4389 | 888.368.4389

For a complete listing of HR Green locations, please visit www.hrgreen.com

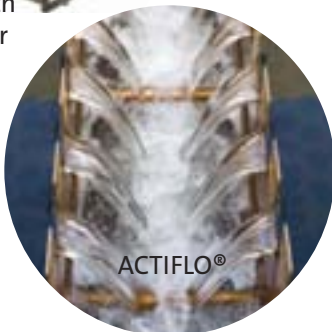
TRANSPORTATION • COMMUNITY RESOURCES • WATER/WASTEWATER • CONSTRUCTION
ENVIRONMENTAL RESOURCES • BUILDINGS • TECHNOLOGY • RENEWABLE ENERGY

Meet Phosphorus Limits with Kruger Technologies

REDUCE PHOSPHORUS NOW



Hydrotech
Discfilter



ACTIFLO®

Let Kruger assist your plant in reducing your current phosphorus discharge limit. Kruger's Hydrotech Discfilter and ACTIFLO® processes are ideal for your phosphorus removal needs.

- Proven performance and experience backed by a large installation list
- Small footprint
- Meets effluent phosphorus concentrations from 0.5 to 0.05 mg/l
- Easily able to retrofit into existing facilities

401 Harrison Oaks Blvd., Suite 100
Cary, NC 27513
Phone: 919.677.8310
Fax: 919.677.0082
krugerincmarketing@veoliawater.com
www.krugerus.com

CSWEA's CSX/YPX '10 Wrap-up

Once again, leaders from CSWEA at all levels gathered at the Kalahari Resort in the Wisconsin Dells for two days of brainstorming and strategic planning on ways to improve our association. This was a great event with plenty of interaction between committees and our three sections. As usual, we began by reviewing past years' Big Ideas and discussed the implementation status of each of those potential initiative. After thoughtful review, it was concluded that we would be better served by focusing on a limited number of topics and initiatives that would best serve our members. With that in mind, here is a rundown of the Big Ideas that we compiled at CSX '10.

Re-tooling of our CSWEA Annual Meeting to:

- a. Meet current member needs and travel limitations.
- b. Attract more attendance (fill the technical sessions/support our exhibitors).
- c. Technical Program enhancements – target hot topics and issues of wide interest.
- d. Partnering with other organizations – win/win.
- e. May want to add a forum at meetings like the digester foaming exchange at the education seminar that got more operators to the meeting.
 - Send issues and questions in advance to be discussed.
 - Solicit specific talks from operators as part of the forum.
 - Have 1.5 day review followed by the test.
 - Arrange to have the operator certification.
 - This needs to include an incentive to go to the booths.
- f. May want to have the forum as a preconference workshop or the leadership academy as a preconference workshop.
- g. Refine the technical program (interest based technical selection), number of tracks? Length during the day.
- h. The best program brings people to the conference, which brings people to the exhibitors, etc. Maybe solicit an operator focused paper track.
- i. Does CSWEA need to have events every night? Perhaps just have a late evening get-together at much less expense.



1. MWIE partnership with WWA: How can we grow this event and eliminate negatives.

- a. MWIE, Expo:
 - Net positive event to both organizations.
 - Issue of competing with selling booths for our event.
 - There is a commitment for at least 2011 and 2012 based on new MOU.
- b. How do we get more of our member to attend?
 - Should operations challenge event be held?
 - Suggestion of providing workshop space (like committee meeting).
 - Reduced rate for exhibiting at both.
 - Free membership with attendance registration.

2. Section Exchange: Section Chairs/Reps

- a. How to get more people to attend Section Meetings?
 - Use Go-To or other webinar meeting venue.
- b. Going paperless:
 - Make sure that events get posted to the website!
 - Use tools available, e-blasts, online registration, etc.

3. CSWEA YP Leadership Academy – Rich Hussey

(How to attract more YPs whether engineering, students, ops, maint., collection, lab, etc)

- Should this be the day before the Education Seminar? General support for this.

Wastewater Systems

- ✓ Facility Plans
- ✓ Sewer Planning/Models/Design
- ✓ Pump Station Design
- ✓ I&I/SSS/CSO/SSO Analysis
- ✓ Biosolids Management
- ✓ SCADA/Automation
- ✓ Energy Studies
- ✓ Funding Assistance
- ✓ Treatment Facilities
- ✓ Electrical/Mechanical/Security



Clark Dietz
ENGINEERS
www.clark-dietz.com

Kenosha - Wausau - Champaign - Chicago - Indianapolis - Evansville

- Concern for it to be cheap enough for the students to be able to attend.
- Need to customize to our field/industry.
- Maybe do as a half-day or have a 10:30 start.
- Maybe tie in an intro to the topic of the Education Seminar.
- May want to have it be a returning academy that after three years you get a certificate "graduating from the CSWEA leadership academy."
- What should be fee be? Shouldn't be more than \$75 or more.
- Could be an opportunity for YPs that attend to take this back to their states and do programs in their individual sections.
 - The consensus was to move this forward at the Education Seminar for this year.

4. Staying Connected with Student Chapters

- How do we keep continuity?
 - Student and professional mixer at the end of the year.
 - Professionals need to reach out to the students, be personal.
 - Invite the student chapter presidents to the section meetings.
 - How many members are in the UW Madison (5-10 registered), some speaker presentations have about 20.
 - Need to get Student Chapter pages onto our website.
 - Have a student chapter exchange.
 - Add a resources available page on the website for student chapters.
 - Maybe have Student Chapter exchange in Feb. at MWIE.
 - Maybe have the Student Chapters submit a budget and then provide them with the funds in advance and then report on their progress at the end of the year.

- Start a mentoring program, have the sponsors pay membership fee and then be the point of contact within the organization.

5. Awards Process Improvements – Beth Vogt

- Create links on the website for the submittal of all awards.
- Add a table of awards to the website with who to, dates – Randy Wirtz.
- Move deadlines to December 15 to subcommittee chairs and January 15 to General Awards.
- Modify the SOPs for changes to dates – Beth Vogt.
 - Notify state sections that dates are changed and that they should modify their SOPs for these.
- April 1 deadline to WEF.

6. Stronger Connections between CSWEA, Sections, Operators Groups and Others

- Section committee chairs should be on national committee.
- Get Wisconsin government affairs information on to these committees in the other sections.
- WEF Wastewater Challenge: Is CSWEA interested in sponsoring a local version? This is a design build competition. Last year was at the WEF collection system conference in June, next year it will be in May at the Biosolids Conference; this came up at the WEF student exchange last year.

What a great CSX! You do not want to miss CSX '11 scheduled for July 21-22, 2011 again at the Kalahari. Mark your calendars now and plan to bring the family for a mini-vacation while you attend CSX. [CS](#)



MANHOLE & WETWELL RESTORATION



**Prevents Corrosion & Stops Infiltration
Stress Skin Panel Adds Structural Strength
Restores Structure Walls to Original Levels
Cost Competitive
10-YEAR WARRANTY
A 7' DEEP MANHOLE CAN BE LINED IN
LESS THAN 1 HOUR
SpectraShield® Liner System
www.spectrashield.com**

Your Water & Wastewater Pumping Specialists

Pre-Fabricated Housed Pumping Systems

- Pre-piped and wired
- Shipped fully assembled and ready to install
- Several housing options available
- Touch screen control operation
- Generator and chemical rooms available
- Custom Variable Speed Control Systems



Below Ground Prefabricated Lift Stations

- Single-source systems complete with all equipment required for operation
- Available in stainless steel, coated steel options, high density polyethylene and fiberglass
- Simplex, duplex, triplex or larger systems available
- Outside valve box permits servicing without entering sump
- Custom Variable or Constant Speed Control Systems



The Pumping World's One Stop Shop!™



37 Forestwood Drive
Romeoville, IL 60446
800-323-1665 • Fax 815-886-6932
www.metropolitanind.com



Plan on Attending our 6th Annual **MIDWEST WATER INDUSTRY EXPO**

CSWEA and WWA have recommitted co-sponsoring our Midwest Water Industry Expo for 2011 and look forward to the best event yet. The **6th Expo will be on Tuesday and Wednesday February 8-9, 2011 at the Kalahari.** Plan on attending, the expo is everybody's favorite mid-winter getaway. Our first five expos were great and we expect even more fun and good sharing of information in 2010. If you haven't ever been to the expo or

you haven't gone recently, come see what you've been missing; great exhibitors, cost effective CEUs and great fun.


The expo has been enjoyed by the attendees and exhibitors. Both groups found it to be a productive and valuable use of their time. Everyone leaves looking forward to next year. Over the years, a lot of people have brought their families so they can give them a little break from winter at the Kalahari's Water Park. You

get a room with up to four water park passes for only \$99.

The expo is the exhibitors' opportunity to present their goods and services to their customers and potential customers early in the year when purchases are being considered and to provide the opportunity for open dialogue with the vendors for awareness of upcoming projects and Utility needs. The Midwest Water Industry Expo accomplishes that goal.

MWIE is enjoyed by vendors and attendees alike, here's a run down on what you can expect at MWIE 2011

- Last year, the fundraising raffle that gave away well over \$5,000 in prizes including a 42-inch flat screen television, three smaller flat screen televisions and many other exciting prizes. Over the years, the raffle has given away \$20,000.
- More than 400 individuals, not counting exhibitors, attended the expo.
- 95 exhibit spaces were used.
- Held 32 half-hour vendor presentations where vendors could talk specifically about the products they represent.
- Four CEUs per day, up to a total of eight for water or wastewater.
- Continental breakfast and lunch provided both days.
- Meet and greet from 3:00 to 5:00 on Tuesday, February 8th

Planning is already under way for the expo, but it's not too late to get involved. If you would like to help on the expo committee, send an email to Eric Lecuyer at cswea@ymail.com or talk to anyone on the committee. 



ELIMINATE ODOR AND CORROSION

ECO₂

- **Advanced Pure Oxygen System**
90-95% Oxygen Transfer Efficiency
- **PREVENTS the Formation of H₂S**
- **No Hazardous Chemicals**
- **Ultra-Low O&M Costs**
- **GUARANTEED Performance**

VISIT US ON THE WEB:
WWW.ECO2TECH.COM
OR CONTACT US AT (317) 706 - 6484

THE LAST ODOR CONTROL SOLUTION YOU WILL EVER NEED!

WORLD CLASS TECHNOLOGY. DELIVERED LOCALLY.



Hand Held
Data Collection



3G Mobile™ AMR



FixedLine™ AMI



Interpreter™ Universal
AMR Register System



Water+Gas+Electric



AccuLink™ Hi-Resolution
Register System



Octave™ Ultrasonic



5/8" - 2"
PD & Multi-jet



Commercial
Measurement



Hi-Resolution
Data Logging



Revenue Impact
Alerts



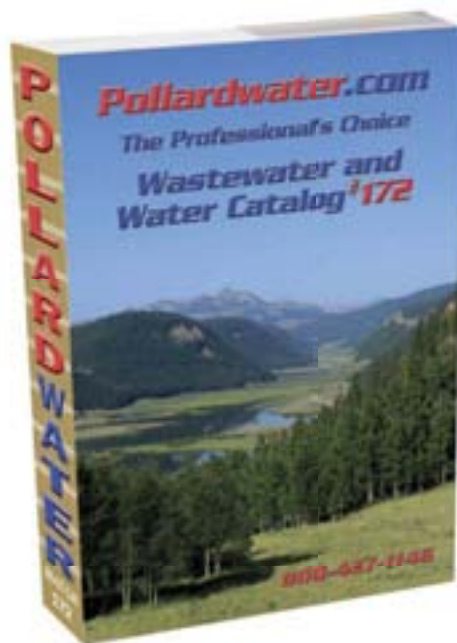
MasterLink™ Enterprise
Management System

Visit MasterMeter.com Today.

Pollardwater.com

If you need it, we have it!

AERATION
CHART RECORDER
CHWEN FEED PUMPS
DECHLORINATION
FLOW TESTING
GAUGES
HOSE
HYDRANT
VALVE KEYS
LABORATORY
LEAK DETECTION
LEVEL CONTROL
LOCATORS
MANHOLE
METERS
ODOR CONTROL
PIPELINE
PLUGS
PROCESS
PUMPS
REFERENCE
SAFETY
SAMPLING
STORMWATER
VALVE
WASTEWATER



Call for your 1408 page catalog.

**Find it all at
www.pollardwater.com**

Phone 800-437-1146

Transitioning Success

By Mark Eddington

Whether it is handing your family business down to the next generation or turning your section committee over to the next logical chair, well thought out succession planning is an invaluable part of good organizational strategy.

Certainly, while in the trough of our current economic downturn, now is as good a time as any to revisit long-term strategies as they relate to the transition of responsibility and institutional knowledge to the next generation of wastewater professionals.

Like every other aspect of business, succession planning begins with good interpersonal communication. There may indeed be difficult conversations about impending retirements or health-related concerns. While potentially uncomfortable, this thoughtful internal dialogue becomes the backbone of a solid organization. Essentially, it is in the best interest of the organization and the employee to discuss professional goals and expectations. If the proper succession planning and systematic transition of institutional knowledge has not been thoroughly considered, long-term institutional success can only be accidentally attained. We should be enabling our successors to succeed in every possible way.

While seemingly a daunting task, good organizations intrinsically possess tools and policies that aid a successful transition of responsibility. It goes without saying that employee mentoring programs and continued career development strategies improve workplace capabilities and overall performance. In a perfect world, just like with a successful baseball team, you would use your own farm system to restock your starting lineup.

This starts with drafting quality coachable employees and systematically providing the skills needed for success and career advancement. But, like in baseball, free agency becomes an important consideration and retaining good team members can become a challenge. Placing important team members in roles that are commensurate with their skill set and systematically challenging employees to take initiative in their own career development should be encouraged and fostered by management. It has been documented that employees who clearly understand their position in the organization, and the process by which they ultimately will be promoted, will be retained. It is management's responsibility to ensure that employees know where they fit in and if they are indeed on the right career track to meet their goals. It is here where the employee review process becomes an opportune venue to begin this important dialogue. Employer and employee can build a roadmap through performance benchmarks that address employee retention and enable the organization to build from within. Certainly, there are instances where picking up a free agent is in the best interest of the organization, but the costs of external recruiting

coupled with the loss of institutional knowledge and professional relationships are often a high cost to pay. More often than not, organizations cannot easily hire their way out of a messy transition.

Regardless of whether or not your organization has a bona fide succession plan, retention of institutional knowledge is equally important. All organizations seem to have that one person who knows where everything is supposed to be, whether it is a sewer foreman that doesn't need an atlas to know where the utility conflicts are or an administrative assistant that understands that comprehensive databases and

archives save time for everyone. It should be every organization's goal to enable all their employees to have access to as much information as possible. Providing this can raise the level of service and also empower the employee. Technology has become an effective tool in achieving this goal. Yesterday's spreadsheets have become today's Geographic Information Systems (GIS). GIS has become an essential part of governmental planning, data storage, and streamlined service. Investment in user-friendly GIS software and the proper training of technicians can save long-term costs while systematically elevating the level of

service and memorializing data. In short, it is an excellent method of integrating an organization's data management system with an electronic record keeping system. Again, it is management's responsibility to provide the necessary tools and policies to encourage the transfer of institutional knowledge both through technology and an understanding that an employee is not training their own replacement only to become expendable. Employees are willing to work longer, and organizations with foresight are beginning to offer their recent retirees part-time consulting positions to aid their younger replacements. There is no panacea for comprehensive retention of institutional knowledge, however, a combination of technology and transition planning develop a path toward success.

It is difficult enough to manage a successful organization when times are good and all positions are filled with competent, assertive administrative and operational staff. When change occurs, whether it is through retirement or unexpected circumstances, stop gap measures can ultimately result in an organization's downfall. Just as one plans for their own eventual retirement, organizational management must plan for the retirement and transition of duties for each key member of their organization. This can be as simple as cross-training employees to ensure redundancy in knowledge of important tasks and policies. Certainly, as a public agency, one can always use peers as a reference. There are many excellent public organizations that have experienced transition and loss of knowledge. Many have learned to systematically address both issues. The Government Accountability Organization (GAO) has been at the forefront of identifying the importance of the collecting, maintaining, and sharing of information and has published many articles on the matter.

In simpler terms, every organization needs to perform a self audit or "fire drill" to understand what measures they will take if tragedy or unexpected retirement occurs within their organization. Will we have to hire a consultant to come in and cut payroll? Does anyone know the password for the main server? We all have emergency response plans for our physical infrastructure, but do we have a personnel related emergency response plan? It is part of our fiduciary duty to our customers and our staff to ensure that we do. **CS**

Mark Eddington, PE is a licensed engineer in Illinois and Wisconsin and is the District Manager of the DeKalb Sanitary District.

Eliminate Valve Pits



Submersible Pump, Valve & Control Stations

No More Wet Valve Pits!

Optional By-Pass Piping

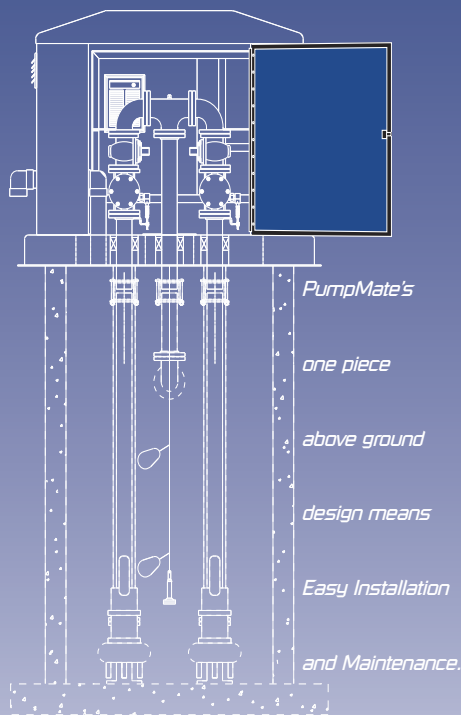
Controls and Valves Protected and Dry

- Controls In Enclosure
- Concrete and Fiberglass-Base
- Textured Enclosure
- Encapsulated Insulation
- Pumps from Major Manufacturers
- Transducer, Floats or Bubbler
- Available in 4 in. and 6 in. piping
- Sentry Controller
- Immediate Delivery



USEMCO

Box 550, 1602 Rezin Road,
Tomah, Wisconsin 54660
Phone: 608-372-5911
Fax: 608-372-5015
Visit us at: www.usemco.com



Please contact USEMCO
for you local representative:
608-372-5911

IMPROVING THE INDUSTRY STANDARD!



RESILIENT SEATED GATE VALVES

Sizes 2" - 72"

- All Ductile - C509 Thick Wall (Not Thin Reduced Wall)
- Extra Strong SS Stem, Standard
- ANSI/NSF 61 Certified
- Extra Thick Epoxy Coated 12+Mils
- EPDM Rubber Seat and Seals
- Flange Classes: 125 or 250
- Flange, MJ, Push-On
- NRS & OS&Y

METAL SEATED GATE VALVES

Sizes 2" - 48"

- IBBM AWWA C500 - Solid Wedge
- Flange Classes: 125 or 250
- NRS & OS&Y
- Rollers, Tracks & Scrapers, Standard

DUCKBILL CHECK VALVES

Sizes 2" - 96"

J&S HedFlex Duckbill Check Valve
Flange & Slip-on



J&S HedFlex Duckbill
Inline Check Valve
Flange & Slip-In



LUG & WAFER BUTTERFLY VALVES

Sizes 2" - 24"



Lug Butterfly Valve
Shown w/Gear & Handwheel



Wafer Butterfly Valve
Shown w/Gear & Handwheel

Ph: 281-324-3990
sales@JandSValve.com
JandSValve.com

J & S Valve

Operations Challenge '10

By Charles Lo Rocco

With excitement and anticipation, CSWEA Operations Challenge teams members listened intently to the preparations and training for their upcoming competition at the 2010 WEFTEC in New Orleans.

Training for the competition was staged at the Madison Metro Sanitary

District Nine Springs Wastewater Treatment Plant and consisted of five events including collections systems, process control, maintenance, safety, and with the assistance of Monty Baker, laboratory.

The selection of team members began back in May 2010 at the conclusion of the Central States Annual Meeting.

The winners of the Operations and Collection System Awards were given the opportunity to participate in this year's WEFTEC Operations Challenge 2010.

The 2009 CSWEA Operations Challenge team members were also invited back to participate if needed. From this pool, two teams were assembled.

The 2010 CSWEA Operations Challenge Teams:

PUMPERS:

Coach Rick Ashling, Albert Lea, MN; Captain Rob Barnard, Moline, IL; Greg Guerrero, Duluth, MN; Matt Schmidt, Green Bay, WI; and Darsey Thoen, Moorhead, MN.

SHOVELERS:

Coach Jim Miller, Buffalo, MN; Captain Jim Huchel, Crystal Lake, IL; Todd Carlson, Duluth, MN; Bryan Thomson, Green Bay, WI; and Ken Bloom, Marathon, WI.

The team members anticipate another exciting and challenging competition and would like to thank Central States Water Environment Association and all of the sponsors and support people whom helped make this opportunity possible. CS



MULCAHY/SHAW
WATER, INC.

10144 N Port Washington Road
 Mequon, Wisconsin 53092
 Tel: 262.241.1199
 Fax: 262.241.4997
info@mulcahyshaw.com
www.mulcahyshaw.com

PROCESS EQUIPMENT & INSTRUMENTATION

Trojan Technologies	www.bryantuv.com	Plasti-Fab	www.plasti-fab.com
Vulcan Industries	www.vulcanindustries.com	Aeromod	www.aeromod.com
Siemens Water	www.water.siemens.com	Aeration Industries	www.aerationindustries.com
Walker Process Equipment	www.walker-process.com	Boerger	www.boerger-pumps.com
Koch Membrane System	www.kochmembrane.com	Whipps, Inc.	www.whipps.com
Hendrick Screen Company	www.waterintake.com	ITT/SANTIAIRE	www.santiaire.com
Roberts Filter Group	www.robertsfiltergroup.com	Phoenix Process Co.	www.dewater.com
HSI	www.hsiblowers.com	Teledyne-ISCO	www.isco.com



Powerful Pumps.

Because they were engineered that way...

Powerful Liquid Solutions

Power Prime™ Pumps.

Blue Pumps that are Green

Power Prime™ Pumps offer features to our customers that ensure a clean environment.

The Tier III Engines meet present and anticipated clean air requirements.

The available Sound Attenuation reduces noise pollution and contributes to a higher urban quality of life.

The fuel economy is up to 25% better than competitive pumps and conserves important fuel resources while delivering – Efficiency-Reliability-Low Operating Costs.

DV-325c
Size 12" x 14"
9,000 GPM
240 FT Head



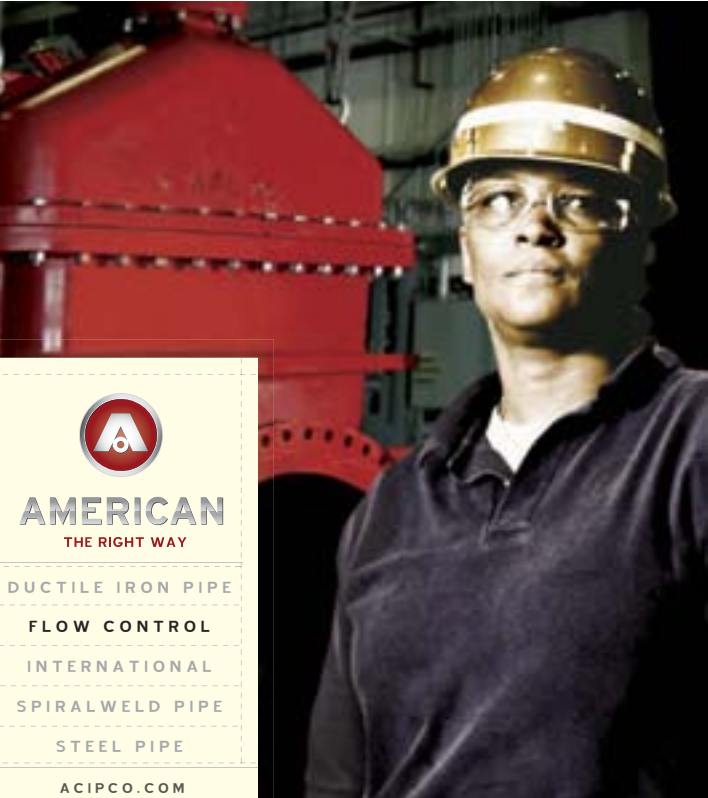
Manufactured in U.S.A.

Engineered Liquid Pumping Solutions

800-647-7246

visit – powerprime.com

POWER PRIME™ PUMPS



AMERICAN
THE RIGHT WAY

- DUCTILE IRON PIPE
- FLOW CONTROL
- INTERNATIONAL
- SPIRALWELD PIPE
- STEEL PIPE

ACIPCO.COM

THE RIGHT WAY MEANS DOING WHAT YOU SAY YOU'LL DO.

NOT SAYING WHAT YOU THINK YOU'LL DO.

At AMERICAN Flow Control, the proven reliability of our valves and hydrants is backed by something you can always count on – a company that believes in doing things the right way. That means being there before, during and after the sale with answers and advice, just like we've done for each and every one of our clients for more than 100 years. Because the right way is the AMERICAN way.



Albert Lea

By Rick Ashling

Wastewater Treatment Plant

Rick Ashling and the operating staff of the Albert Lea MN WWTP received CSWEA's Operations Award for Minnesota at the 83rd Annual Meeting.

The Albert Lea wastewater treatment system is an advanced biological tertiary wastewater treatment facility.

Build in 1983, the facility is a modern, well-maintained wastewater treatment plant. The facility is designed for 12.5 mgd with wet weather flow of 20 mgd with a staff of nine.

Large debris that could damage the wastewater pumps is removed from the raw wastewater prior to entering the pumping station wet well. The raw wastewater is then pumped via a

five-mile forcemain to the wastewater treatment facility.

The wastewater treatment facility consists of grit removal, pre-aeration, primary clarifiers, two-stage aeration secondary clarifiers, nitrification aeration effluent clarifiers, filtration and ultraviolet disinfection prior to discharge to the Shell Rock River. The WAS is collected in the aeration units is thickened by flotation thickeners and combined with the primary biosolids for sludge stabilization. The combined biosolids is anaerobically digested, by two primary anaerobic digesters, two secondary digesters, dewatered by two rotary drum thickeners and stored in two storage tanks until hauled for soil conditioner to farmland.

The wastewater treatment facility is designed to produce an effluent quality of 5 mg/l CBOD, 1 mg/l ammonia nitrogen and 5 mg/l TSS.

The facility is one of the first in the state of Minnesota to install and operate a microturbine using methane gas to produce 120 KW and provide heat recovery. [CS](#)

Influent Wastewater Characteristics

Design Flow	12.5 MGD
BOD	194 mg/l
TSS	278 mg/l
Ammonia Nitrogen	48 mg/l
Effluent Limitation	
BOD	5 mg/l
TSS	5 mg/l
Ammonia Nitrogen	1.0 mg/l

Process Equipment

Aerated Grit Chambers	2
Pre-aeration Tanks	2
Primary Clarifiers	2
Secondary Aeration Tanks	4
Secondary Clarifiers	2
Nitrification Aeration Tanks	4
Nitrification Clarifiers	2
Effluent Filters	4
Ultraviolet Disinfection	4
Dissolved Air Flotation	2

Anaerobic Digesters


First Stage	2
Second Stage	2
Boilers	4
Microturbines	4
Rotating Drum Thickeners	2
Biosolids Storage Tanks	2

ENGINEERING

Multi disciplined
Nationally recognized
Locally dedicated

Madison 608-251-4843
Milwaukee 414-271-0771
Joliet 815-744-4200
www.strand.com

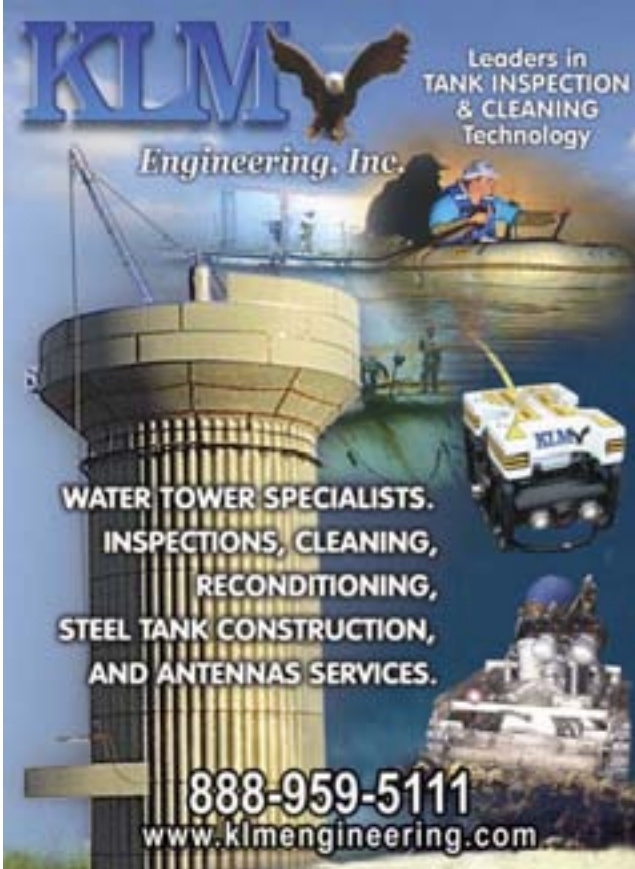
STRAND
ENGINEERING, INC.

KLM  Leaders in
TANK INSPECTION
& CLEANING
Technology

Engineering, Inc.

**WATER TOWER SPECIALISTS.
INSPECTIONS, CLEANING,
RECONDITIONING,
STEEL TANK CONSTRUCTION,
AND ANTENNAS SERVICES.**

888-959-5111
www.klmengineering.com



**SPECIALIZING IN
RENEWABLE ENERGY SYSTEMS**


**UNISON
SOLUTIONS**

Unison Solutions, Inc.
5451 Chavenelle Road
Dubuque, IA 52002
Phone: 563-585-0967
www.unisonsolutions.com

- Biogas Conditioning Systems
- Compressor Skids
- Blower Skids
- Moisture Removal
- Hydrogen Sulfide Removal
- Siloxane Removal
- Capstone Turbine Distributor



JOHN MEUNIER
Committed to providing headworks
solutions that fit your needs

- Escalator® Fine Screen
- Cont-Flo® Bar Screen
- Shaftless Spiral Fine Screens
- Rotarc® Arc Bar Screens
- Rotarc® Arc Brush Fine Screens
- StormGuard® Bypass Screen
- Rotopac® Screw Washer Compactor
- Mectan® and Mectan® 360 Grit Chamber
- SAM® Grit Dewatering Screw

For details on how you can benefit from our headworks solutions, please contact our local representatives Peterson & Matz, Inc. in Illinois and Wisconsin at: 847-844-4405 or Treatment Resources, Inc. in Minnesota at: 651-702-2692.

 **weftec 2010**
Booth # 5439



www.johnmeunier.com
sales@johnmeunier.com

John Meunier Inc.
Tel.: 215-885-4740
Fax: 215-885-4741


**VEOLIA
WATER**
Solutions & Technologies



SCOTT TROTTER

WEF BOARD OF TRUSTEES

TROTTER
ASSOCIATES, INC.
ENGINEERS AND SURVEYORS

Planning, Design and Construction Engineering
Services for Municipal Infrastructure

Experienced Professionals – Better Solutions

Wastewater Engineering	Water Engineering
Street and Parking Improvements	Stormwater Management
Municipal Buildings	Public Works Facilities
Capital Improvements Planning	Subdivision/ Development Review
Utility Mapping/ GIS Data Collection	Land and Route Surveying
Topographic Surveys	Construction Layout
Construction Engineering	Subdivision/ Development Review

40W201 Wasco Road, Suite D
St. Charles, IL 60175
Phone (630) 587-0470
Fax (630) 587-0475
www.trotterandassociates.com

Scott Trotter has been appointed to the Water Environment Federation Board of Trustees (BOT). The Board of Trustees is the governing body of WEF and holds legal and fiduciary responsibility on behalf of WEF and its membership. The board is comprised of the four WEF presidents, the executive director, the WEF treasurer, and 12 appointed trustees.

Mr. Trotter is a registered professional engineer and a board certified specialist in water/ wastewater engineering by the American Academy of Environmental Engineers. Scott is the president of Trotter and Associates, Inc. which is a 20-person civil and environmental engineering firm headquartered in St. Charles, Illinois.

Scott has been an active member of WEF and Central States WEA since 1994. Within Central States, he has served and chaired numerous committees including the Technical Program Committee, WEFTEC Reception Committee, and WEFTEC Local Arrangements Committee in 1997, 2002 and 2008. He is also a co-founder of the University of Illinois' WEF/AWWA Student Chapter. Scott has been a member of the Central States WEA Executive Committee since 2004 and was CSWEA President in 2006-07. Scott has been one of two CSWEA representatives to the Water Environment Federation House of Delegates (HOD) since 2008. The House of Delegates is the deliberative and representational body of the federation and advises the BOT on matters of Strategic Directions and Public Policy Development. While in the House of Delegates, Scott worked on several committees including the Federation Nominating Committee, Federation Audit Committee as well as co-chaired the HOD WEF/MA Relations Committee, and Chaired the HOD Budget Committee. [CS](#)

Calling on our Young Professionals and Senior Members

By Rich Hussey



As I sit on an airplane

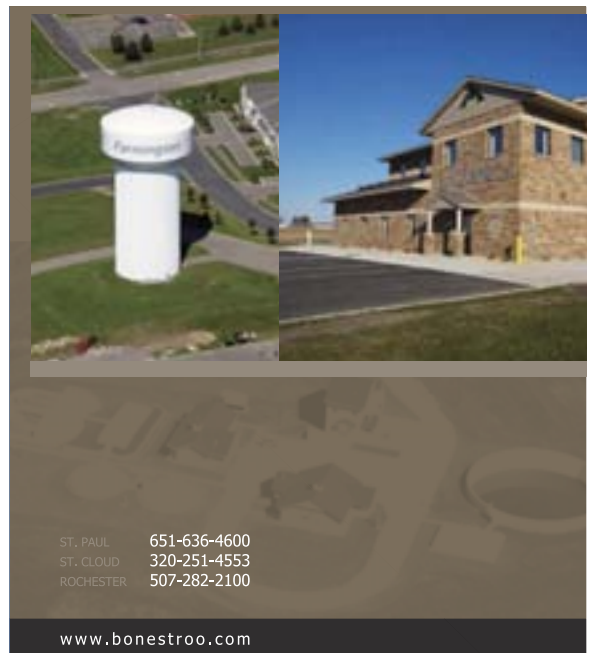
traveling to Houston for a manufacturer sales training seminar, I am brainstorming on how we can get young professionals (YPs) in CSWEA to become more active and possibly more importantly how we can get our senior members to recognize the importance of getting their young professionals from their organizations to attend CSWEA events. We are all familiar and understand the importance of sustaining growth within our membership and committees along with the development and mentoring of the younger generation, but then why do we struggle to see YPs at CSWEA and YP events?

We are facing hard economic times, but not less than five years ago we were under a historic housing market where revenues were up, growth was everywhere, and a significant amount of WWTPs were engaged in various expansion or rehabilitation projects. Budgets allowed attendance at conferences and seminars, both in state and out of state. Unfortunately at that time, the YP involvement was approximately the same as with the current market. With the hardship we face these days, we have all experienced that budgets are tighter. Therefore, since it is cheaper for the consultants and districts to

send their YPs than their senior members, let's help those budgets along and send those YPs. Senior members participate since CSWEA as an organization brings value to their attendance, therefore sending your YPs will continue to bring your organization value, just at a cheaper cost. I understand that argument will not hold, but it was worth a try.

WEF and CSWEA have invested significant resources in an attempt to

bring more activity and opportunity to the YPs and students. CSWEA is currently developing a YP Leadership Academy, but we need your help. The preliminary plan is to schedule it the day prior to the CSWEA Education Seminar in Madison, WI. The topics will include project management, challenges within the water and wastewater community, team building, communication, networking opportunities, and a presentation focusing



ST. PAUL 651-636-4600
ST. CLOUD 320-251-4553
ROCHESTER 507-282-2100

www.bonestroo.com

on the Education Seminar topic that will be specifically developed for the YPs. We plan to make this an annual event with new topics and presentations to be held in conjunction with the Education Seminar theme. We believe this program will bring value to the attendees and with a discounted package to attend the CSWEA Education Seminar, I believe it will be one of the best two-day programs in the country at a very modest cost. We would encourage members to plan on sending a YP and include this seminar in their upcoming annual budgets.

We have seen the first generation *Clean Water Act* members retire in recent years in significant proportions and some leaving set to leave over the next few years. Therefore, it is only natural that the next generation becomes involved in our CSWEA community. Mark Eddington has written an article in this issue regarding succession planning and as your organizations collectively evaluate and prepare your plans, we as members also need to evaluate CSWEA's succession plan. CSWEA has provided your organization opportunities. Now is

the time for our members to pay back those opportunities by allowing and encouraging your YPs to become active within CSWEA.

So as I continue this flight to Houston, I could brainstorm various opportunities to create more involvement from our YPs, but my initial thought and mindset keeps coming back to the networking possibilities, social events, and committee opportunities that we offer or could offer mean little without the support and encouragement from our senior members.

My previous employer is able to identify young talent and present them with opportunities. They encouraged their YPs to become active within the industry and as a result have received some great results as their employees develop and gain more clients. There are a number of consultants that follow this same plan and they have experienced similar results. However, there is an argument or concern that if we start to allow our younger talent to explore organizations and networking opportunities, there is a greater risk that could lead to their departure to another organization. Yes, this does happen, but one may argue it most likely would have happened anyway. Questioning on keeping the talented YPs sheltered versus allowing them to develop further, we all know that the positives more than outweigh the negative consequences and the organization gets so much more value and return to grant these possibilities.

The YPs have a variety of social events throughout each state level, including manufacturer factory tours, technical seminars, Milwaukee Brewers baseball games, golf instructional events, and more. There are a lot of committees that would welcome YP involvement and there are YP gatherings at each of the CSWEA events. Ultimately we should all hope to see the YPs at the social events, senior members drag their YPs to events, and develop that next generation of water and wastewater professionals in partnership with our CSWEA organization, as we all benefit.

If you would like to know of upcoming YP social events or committee participation, you are more than welcome to contact me or your assigned state section chairs. We hope to see more YPs. [CS](#)

**REDUCE
YOUR OPERATING COST**
With Crane Engineering

abs
GR GORMAN-RUPP
PUMPS
MILLIKEN
VALVE COMPANY
ITT
GRUNDFOS
rotork
LAKESIDE
EQUIPMENT COMPANY

**CRANE
ENGINEERING** Since 1939

Call **920-733-4425**
or go to **craneengineering.net**

A Youthful Apprenticeship

As with many young people these days, 26-year old Andy Pakosta knew little about a career in wastewater treatment. Now he's one of the many young professionals working and learning in this important environmental industry.

In the Western Suburbs of Chicago, Illinois, the Glenbard Wastewater Authority (GWA) was established in 1977 as a regionalization of smaller locally operated wastewater treatment facilities. GWA operates Wastewater Treatment systems for the Village of Glen Ellyn, Village of Lombard, and unincorporated DuPage County serving some 105,000 residents living in roughly 22.5 square miles. GWA's systems include a 16.02 MGD Glenbard Advanced Treatment Facility, a state-of-the-art high-purity oxygen two-stage activated sludge plant; a 58.0 MGD Lombard Stormwater Facility, a combined sewage overflow plant; regional interceptors; and a series of lift stations.

These treatment systems are only staffed between the hours of 7 a.m. and 3:30 p.m., and other hours as required during heavy rain events. A sophisticated supervisory control and data acquisition (SCADA) system monitors and alerts on-call staff of significant changes or alarm conditions during off hours. Licensed operators then make corrections

on-line via laptop, and/or respond to the plant as required. The Authority employs fourteen (14) highly qualified operations and maintenance personnel ranging from two to 32 years' experience in the industry who provide these vital services.

Mr. Dave Goodalis, Senior Plant Operator, spoke enthusiastically about Pakosta, and the need for youth in the industry. "As protecting the environment and being green has become the latest trend, most of the younger people pursuing careers are looking for that desk in an office environment where they simply move paper around. Andy is a rarity of this younger generation. He opted for a career in the trenches getting his hands dirty protecting our water resources, and is learning quickly."

Pakosta joined the GWA staff 18 months ago, and has already acquired his IEPA Class 4 Treatment Operators License. He sees this career as making a difference in the environment, and even people's lives. He talks about his perspectives in this interview with *Central States Water*.



L-R: Dave Goodalis and Andy Pakosta

Photos for publication with permission received from David Goodalis and Andy Pakosta.

CS Water: How did you get started in wastewater treatment?

PAKOSTA: Actually, I was talking to a family friend that works in wastewater treatment. As we were talking I became more and more interested in the industry. He mentioned that he knew about an opening, and after talking with my friend I became intrigued with the opportunity, decided to hand in my resume, and I got the position after interviewing.

The power of integration

Engage stakeholders, preserve resources, protect the environment, stimulate economic vitality. Making life better in smart and sustainable ways.

Chicago, Illinois • St. Paul, Minnesota • Milwaukee, Wisconsin

CDM[®]
www.cdm.com



CS Water: How would you describe your background and schooling? Did it prepare you for work in this profession?

PAKOSTA: I have taken some college classes mostly just the general education classes. At first I didn't think education would relate as much to this profession because it's such a specialized industry. The more I learn about the treatment process, I realize that critical thinking and math play a huge role in my career.

CS Water: What is it about this profession that you find personally satisfying?

PAKOSTA: Most satisfying about this career is you make a difference in the environment and even people's lives. I'm proud of what this industry accomplishes and what I contribute to the process daily.

CS Water: Talk about your responsibilities at the treatment plant?

PAKOSTA: There are many different responsibilities that I have at the plant,

from running our cryogenic oxygen facility efficiently to general housekeeping. What I'm most proud of is using that facility's resources to treat the wastewater in the most efficient way.

CS Water: Who has been helpful to you during the first year of your new career? Do you see it as a career?

PAKOSTA: Everyone that I work with has played a vital role in my first year, but the operators that train me and I work with, mostly have really done an exceptional job teaching me the nuances of wastewater treatment. I believe this is a very important career and I'm very proud of what we do.

CS Water: In your opinion, what can the industry do to attract more young people to join the ranks working at treatment plants?

PAKOSTA: I feel that the younger people want a career that is important; they want to feel like all their hard work

is going towards something more than a paycheck. This industry provides one of the most important recourses for human survival; clean water. Also, the fundamentals of wastewater treatment is universal, you can travel anywhere in the world and there will be jobs.

CS Water: What do you think is the best way to get this message out to young people?

PAKOSTA: I think the best way is general workshops or job fairs, but the industry really has to focus on the green aspect and the importance of the job to the potential younger employees.

CS Water: How do your friends, people your age, respond when you tell them you work at a wastewater treatment plant?

PAKOSTA: At first my friends were a confused and a little grossed out by my career choice. After I explain the details and the impact of the industry on the world, they went from grossed out to jealous.

CS Water: How are you preparing yourself to advance in this profession? And, how do you see your career developing years from now?

PAKOSTA: I feel like there is unlimited growth in the wastewater industry, and you will advance on what you know and how hard you work. I'm going to focus on those two things and see where my career goes from there. My Senior Operator started out just like me, and some 28 years later, he's succeeded beyond his expectations. I'm sure I can too.

Mr. Goodalis had this final thought about Pakosta: "Andy has a great team attitude and is willing to work wherever he is needed. His skills as an operator are growing fast. He's taking advantage of every opportunity to learn new things daily from the old-timers. Andy tells me his goal is to work hard, attain his Class 1 Operator's license, and then go on to become an Operations Supervisor. If he continues with his current attitude, commitment to learning, and enthusiasm for his work, I see no reason why he cannot attain this goal. I wish I saw more young men like him coming up in our industry." **CS**

How Much Chemical Did You Feed?

Weigh it & know it!

Our Systems Keep You Informed.

- Recommended By State Agencies
- Most Accurate Method
- Local & Remote Monitoring
- Level Alarms & Setpoints



Wizard 4000® Advanced Multi-Channel Indicator



Chlor-Scale 150® for Chlorine and Ammonia Gas Cylinders



WARRANTY



FORCE FLOW



Chem-Scales™ for Day Tanks of Hypo, Caustic, Polymer

www.forceflow.com

Visit our Website for Monitoring All Types of Tanks and Cylinders Catalog Hotline (800) 893-6723

**SEVERN
TRENT
SERVICES**

Capital Controls®
Water and Wastewater Disinfection Products

Capital Controls® 1870E
Chlorine Residual Analyzers



Microchem®2
Residual CL2/pH/ORP Analyzers/DO/
Bromine/Ozone/Conductivity



Capital Controls® Series 200
Cylinder or Ton Mounted Feeders
CL2/SO2/NH3/CO2



Capital Controls® FX4400
Cabinet Gas Feed Systems



Capital Controls® Chloromatic™ 3000
Intelligent Gas Flow Control Valves



Illinois:

Drydon Equipment, Inc.
Woody Wolff
2445 Westfield Drive • Suite 100
Elgin, IL 60124
Tel 224 629 4060
Fax 224 629 4061
wwolff@drydon.com
www.drydon.com

Wisconsin:

Drydon Equipment, Inc.
Jeff Williamson
3033 South 128th Street
New Berlin, WI 53153
Tel 262 827 9201
Fax 262 827 9203
jwilliamson@drydon.com
www.drydon.com

Minnesota:

Engineering America
Tony Belden
647 Hale Avenue N.
Oakdale, MN 55128
Tel 651 777 4041
Fax 651 777 5312
tbelden@engamerica.com
www.engamerica.com

www.severntrentservices.com

**The Most Specified Name in WWTP Grit Removal...
Just Got Even Better.**

PISTA.360
GRIT REMOVAL SYSTEM



New!
Cost Saving Design Features

**Introducing the PISTA 360™
with Patented V-FORCE™ Baffle**

The new PISTA 360™ Grit Removal System with patented V-FORCE™ Baffle delivers practical system design and significant cost-saving considerations for municipalities prior to and after installation. The PISTA 360™ design increases velocity during low flow periods while maintaining consistent grit capture during surges. This patented hydraulic 360-degree design creates a forced vortex for efficiently capturing grit at all flows. Its ability to handle significant variances between design and peak flow conditions can eliminate the need for multiple grit chamber arrangements, which in turn, lowers initial capital and long-term operational costs. The integral V-FORCE™ Baffle design also serves as a water level control device, often eliminating the need for downstream flow control devices like weirs.

Why Cities & Consultants Specify PISTA.:

- Unparalleled Grit Removal Performance
- Available in Large Flows: 100 MGD Units / 500+ MGD Systems
- Patented & Exclusive S&L Features Like:
Flat-Floor Vortex, V-FORCE™ Baffle, Grit Handling Components
- Vast S&L Grit Removal & Testing Experience

Contact Us for Project Assistance or to
Locate One of Our Local Reps in the Central States region!
smithandloveless.com • 800-898-9122

Smith & Loveless Inc.





Fox Valley Operators Association 4th Annual Conference

By Karen Katamay

Four and a half years ago, the education committee for the Fox Valley Operators Association had a meeting and discussed having a one-day conference to provide some local training for our members.

Many of our members were regular operators who weren't able to travel to the bigger state conferences on a regular basis and just wanted some information that would help them run their plants better. So the committee polled our members and asked them what topics they would like to learn about. Then, with the generosity of the Huntley Public Works staff, we were able to hold our first conference at the Huntley Public Works facility on Sept. 20, 2007.

The first conference was well received and our members indicated that they

would like us to continue the conferences, so it then became an annual event. Each year we made improvements and the conference grew in both attendees and vendors. By holding the conference at a member public works facility, we were able to keep our costs low and affordable so many of our members could attend.

Our 4th annual conference was held on August 19, 2010, with the conference this year at the Algonquin Public Works facility. Over 180 people attended and we had 38 vendor displays. We had two different tracks for our technical sessions,

engineering | planning | environmental | construction

Minneapolis 888.541.4800
St. Cloud 877.252.4900
wsbeng.com


WSB
& Associates, Inc.



including a basic track for newer operators and an advanced track for our more seasoned professionals. Our basic track included training in wastewater characteristics, sampling procedures and preventive maintenance. Our advanced track included information on energy efficiency practices, energy audits and water quality standards updates. Following a buffet lunch, we then had a choice of two workshops, including electrical safety and FOG/pretreatment programs and guidelines.

The support of our vendors has been very positive, and we reluctantly had to actually turn away vendors who tried to register past our vendor deadline. Many of our vendors contributed above and beyond the cost of their booth toward the food and raffle gifts, as well as providing lots of good information and contacts for our operators. Holding the conference at the Algonquin Public Works facility also allowed us to have displays of larger items like vector trucks, televising equipment, pumps, and even a polymer dewatering system.

Another positive result of the conference was the establishment of new professional associations with groups like CSWEA and other organizations and we are looking to establish some training partnerships with these organizations in the future.

Our mission at the Fox Valley Operators Association is to provide networking and training for our members who are wastewater professionals, and our conference is just one venue for us to do this. As long as we have members who want to keep learning, we will continue to provide training. Please join us at our future conferences. 



Oldcastle Precast®

Packaged Wastewater Treatment Systems

AlgaePac™
Featuring **algae wheel** Technology

- Low Energy
- Low Maintenance
- Tertiary Treatment System
- Harnessing the Power of Algae

Toll Free 888-965-3227
www.oldcastleprecast.com/wastewater

Equipment *for* Water, Wastewater & Industry

John Szymanski Master Plumber is "The Other Guy"

35 years serving the industry

Member of: AWWA, MWOA, WWOA, MRWA, ABPA

Get your water treatment questions answered.

65910 – 267th St. Alden, MN 56009-4211

800-253-7235

507-863-2367 (Fax)

507-383-1063 (The Other Guy's cell)

JohnSzymanski99@hotmail.com

The Other Guy Companies

► **ALDEN POOL AND MUNICIPAL SUPPLY CO**
Chemical Feed Pumps & Gas Chlorinators
Parts, repairs and accessories for most popular brands
www.aldenpool.com

► **HI-E-DRYSTORE.COM**
Keep your pump houses and water plants dry.
Replacement filters and repairs
www.hi-e-drystore.com

► **MID-AMERICA BACKFLOW PREVENTER CO.**
Cross connection programs
Backflow preventers and repair kits
Testing and repair

► **MID-AMERICA ULTRAVIOLET CO.**
Replacement UV lamps, quartz sleeves
UV system rebuilds
SAVE UP TO 50% over new



**Control
System
Integrators
aren't all
the same.**

**Discover the
difference.**



W59 N249 Cardinal Ave
Cedarburg, WI 53012
1-800-343-6337
www.energenecs.com

25th Annual Conference on the Environment

Tuesday, November 9, 2010 | Earle Brown Heritage Center
6155 Earle Brown Drive, Brooklyn Center, MN 55430 | www.earlebrown.com

Be sure to mark your calendars and register for the upcoming 25th Annual Conference on the Environment developed jointly by the **Air & Waste Management Association (A&WMA) – Upper Midwest Section**; and the **CSWEA – Minnesota Section**.

Dick Hemmingsen, the Founding Director of the Initiative for Renewable Energy and the Environment (IREE) will be our keynote speaker and will provide us an update on IREE and its mission of "promoting statewide economic development; sustainable, healthy and diverse ecosystems; and national energy security."

As director, he oversees IREE's operational structure, funding processes, partnerships, events, and communications and marketing efforts. Previously, Hemmingsen served as associate director of government relations for the University of Minnesota. For 16 years, he represented the U of M at the state legislature and assisted with federal advocacy for renewable energy, the Agricultural Experiment Station and Cooperative Extension funding. In 1984, Hemmingsen began his career at the U of M as an extension agent and county extension director. Prior to that, he worked as an adult farm management instructor; owned and operated a crops and livestock farm; and taught high school vocational agriculture. Hemmingsen holds a bachelor's degree in agricultural education and a master's degree in adult education from the U of M. In his free time, he's a motorcycle enthusiast and an avid angler.

Conference breakout sessions will cover air quality, biomass, energy conservation/recovery, stormwater, wastewater, water, and waste topic areas. We will have several other outstanding technical papers and presentations during the day from many of our local talent. We are also planning an environmental challenge for the students.

Online registration is available by visiting www.cswea.org/minnesota/events/.

Hotel accommodations can be made by contacting:
Embassy Suites, Minneapolis – Brooklyn Center
6300 Earle Brown Drive
Brooklyn Center, MN 55430
763-560-2700 | www.embassysuites.com



The Goal is Crystal Clear

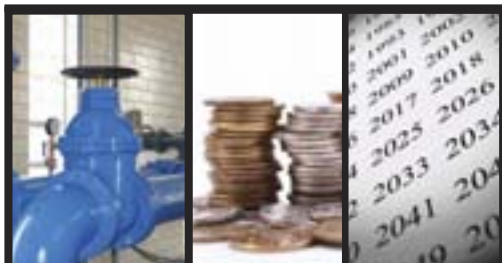
Industry Leaders Specializing in

- **Wastewater Services**
Smoke Testing
Sewer Flow Monitoring
Manhole Inspection & Inventory
- **Water Loss Control Services**
- **Asset Management Services**
- **Water Quality Services**

salesinfo@mesimpson.com Phone: (800) 255-1521
www.mesimpson.com Fax: (888) 531-2444

Valparaiso, IN • Savage, MN • Dyer, IN • Waukegan, IL • Indianapolis, IN • Chicago, IL
Baltimore, MD • Gwinnett County, GA • Phoenix, AZ • San Francisco, CA

PRESERVE THE PAST, MANAGE THE FUTURE.



PROTECT
Your Infrastructure.

PRIORITIZE
Your Spending.

PLAN
Your Future.

Ruekert/Mielke knows that you need to maintain existing infrastructure while still keeping an eye on tomorrow's needs. You need a team of professionals that understand the big picture. Our firm has evolved from our civil engineering core into a team of engineers, scientists, financial analysts, planners, asset management specialists and GIS professionals. This multidisciplinary team is ready to work together with you.

Let's work together to **MEET** your **CHALLENGES**,
SHARE your **CONCERNS** and **ACCOMPLISH** your **GOALS**.



Waukesha 262.542.5733 • **Kenosha** 262.953.2650 • **Madison** 608.819.2600

Visit us on the web at: www.ruekert-mielke.com



Manufacturer representatives for Water and Wastewater Treatment Equipment. We offer sales, design assistance and troubleshooting for:

AMERICAN R/D
BIOREM ODOR CONTROL
CENTRISYS CENTRIFUGES
CHARTER MACHINE COMPANY
COLUMBIA TECH TANK
DAKOTA PUMP
DEZURIK WATER CONTROLS
ENTEX TECHNOLOGIES
FENTON ENVIRONMENTAL TECH
FLOWERVE PUMP
FLUID DYNAMICS
FOXBORO
HEADWORK'S SCREENS
HILTON VALVE, INC.
HSI
HYDRO INTERNATIONAL - CSO
JDV EQUIPMENT CORPORATION
JOWA/ CONSILIUM
KAESER BLOWERS
LAKESIDE EQUIPMENT CORP.
LATANICK EQUIPMENT
MASS TRANSFER SYSTEMS
MFG WATER TREATMENT PROD.

MINE SAFETY APPLIANCE (MSA)
MOYNO PUMP
M²T TECHNOLOGIES
OCV CONTROL VALVES
ODO WATCH
PALL CORPORATION
PERIFLO
POLY PROCESSING
PROCESS SOLUTIONS INC
PULSAFEEDER
PURAFIL
RED VALVE COMPANY
ROBERTS FILTER GROUP
RODNEY HUNT GATES
ROTORK ACTUATORS
RPS ENGINEERING
SANITAIRE/ITT
SHAND & JURS BIOGAS
TIDEFLEX TECHNOLOGIES
TRUMBULL INDUSTRIES
WALKER PROCESS EQUIPMENT
WEDECO UV & OZONE/ITT
WEMCO PUMP

5400 Newport Drive, Rolling Meadows, IL 60008
Phone: 847-392-0990 Fax: 847-392-1095
Web Site: www.LeyAssociates.com

Water Treatment is our Business



Hawkins Water Treatment Group has been meeting the requirements of commercial, industrial, municipal and institutional organizations since 1938.

Hawkins, Inc.
3100 East Hennepin Avenue
Minneapolis, MN 55413
Tel 612 331 9100
Fax 612 617 8601
www.hawkinsinc.com

St. Paul, MN
Mike Clemens, Regional Manager
1425 Red Rock Road • St. Paul, MN 55119
Tel 651 730 1115 • Fax 651 730 1124
mike.clemens@hawkinsinc.com

Fond du Lac, WI
Mark Wolf, Branch Manager
1882 Morris Street • Fond du Lac, WI 54935
Tel 920 923 1850 • Fax 920 923 0606
mark.wolf@hawkinsinc.com

Superior, WI
Brenda Wiisanen, Branch Manager
2026 Winter Street • Superior, WI 54880
Tel 715 392 5121 • Fax 715 392 5122
brenda.wiisanen@hawkinsinc.com

Peotone, IL
Mike Carroll, Branch Manager
32040 South Route 45 • Peotone, IL 60468
Tel 708 258 3797 • Fax 708 258 3789
mike.carroll@hawkinsinc.com

CSWEA's Government Affairs *Comment Letters*

Over the course of the last few months, your CSWEA Government Affairs Committee, led by the Wisconsin Section's Government Affairs committee has commented on two significant proposed rule-making from USEPA. By providing thoughtful comments that are reflective of our associations' commitment to improving our water environment, we have helped the agency in their consideration of these rules.

The first comment letter was on USEPA Region 7's consideration of a TMDL for Total Arsenic for segments of the Mississippi River. As a result of the many comments received, USEPA Region 7 has suspended consideration of the Total Arsenic TMDL.

The second comment letter was in response to USEPA's request for feedback on Sanitary Sewer Overflow (SSO) rule making and again CSWEA's Government Affairs Committee led by the Wisconsin Section, developed a comprehensive response, clearly reflective of our commitment to the environment and sensible, enforceable and effective management of SSOs. Here is a summary of that comment letter.



CSWEA would like to address the questions asked by U.S. EPA in the federal register announcement with respect to wet weather flow management for separate sewer systems.

1. Should EPA propose to clarify it standard permit conditions for SSO reporting, recordkeeping and public notification?

CSWEA believes that SSO reporting, recordkeeping and public notification should be clarified to provide consistency between states, USEPA regions and permittees. This clarification should be in the form of broad guidelines that document essential information and target notification allowing flexibility to work within existing state reporting programs and notification requirements. There should be a sufficient transition period for state programs to be modified to meet minimum federal requirements.

a. Is there a need for establishing this framework and, if so, which SSO events should be subject to reporting, recordkeeping and public notice requirements?

A framework for reporting and notification should be established.

- SSOs associated with equipment or system failures and those observed associated with extreme wet weather events should be subject to reporting. It should be noted that there could be limitations of monitoring and system observation,

particularly SSOs associated extreme wet weather events where a permittee will likely not know of every location, duration and volume of release.

- Releases that constitute a risk for public contact should also be subject to reporting.
- EPA should consider a de minimus volume for notification. EPA should also consider a notification policy that allows the permittee to notify potentially affected parties depending on the nature of the release. General regional notifications may ultimately be ignored if they are not focused on those affected.

b. Should EPA clarify that such requirements apply to SSOs that do not result in a discharge to waters of the United States, including sewage backups in basements?

- SSOs that do not reach waters of the United States should be documented but not subject to reporting.
- Private laterals ownership is typically either the responsibility of the homeowner or shared responsibility with the utility. Therefore basement backups due to blockages are usually the responsibility

of the homeowner. Basement backups do not usually result in a discharge to the waters of the United States. Basement backups are a service issue, and utilities typically record and correct those caused by the public system. Basement backups should not be reported as SSOs, but dealt with as a corrective measure through public education and a component of the CMOM program.

c. Which SSO events should be reported immediately?

- SSOs with the potential for public contact and/or public health impacts should be reported immediately. We request that the notification requirements are similar to Wisconsin where a notification is submitted within 24 hours with the details and back-up submitted within 5 days.

d. What criteria should be used to determine if notice of public health officials is appropriate for an SSO event?

- Public health officials should be notified if there is potential for public contact as noted above, such as public swimming beaches or other locations where recreational use of water may occur.

e. Should EPA establish minimum requirements for monitoring SSOs to alert the municipal operator in a timely manner? If so, what are appropriate methods, technologies for management programs for monitoring SSOs?

- Critical monitoring locations and methods should be determined through the capacity analysis of the CMOM program. Methods such as: flow and level monitoring with telemetry or remote monitoring and visual observation are tools that can be used depending on system size and complexity and personnel and financial resources.

f. Should EPA require immediate notification to the public of SSOs? If so, for which SSOs and how and when should the public be notified?

- SSOs with the potential for general public contact should require notification. Ideally the notification should be targeted at the potentially affected population. Website information, e-mail blasts to interested parties, radio, television and print media can all be used for notification.

2. Should EPA propose to develop a standard permit condition with requirements for capacity, management, operations and maintenance programs based on asset management principles?

NPDES permits currently include requirements for proper operation and maintenance. A general permit condition should include a CMOM program. EPA Guidance for CMOM programs should be developed. We recommend that WEF/NACWA "Core Attributes of Effectively Managed Collection Systems" serve as the basis for CMOM principles.

3. Should EPA propose to require permit coverage for municipal satellite collection systems?

Municipal or private satellite collection systems should be permitted. Permits should include CMOM program requirements and SSO reporting provisions. Notification should be coordinated with the POTW. Permits may include control provisions specific to the POTW that receives their flow. Permits should be separate from the POTW permit and should require a responsible operator/sewer utility manager, independent of the POTW responsible for treating the sewage from the satellite community.

The State of Wisconsin in its WPDES permit program has already begun the process of permitting collection systems in communities like Fond du Lac and the tributary communities to the Milwaukee Metropolitan Sewerage District.

A phase-in period for satellite community operational managers to be required should be provided and states should develop qualification requirements, such as a certification program, for the collection system operational responsibilities.

4. What is the appropriate role of NPDES permits in addressing unauthorized SSOs that are caused by exceptional circumstance?

Wastewater collection and treatment systems are subject to flow in excess of normal residential, commercial, and industrial sanitary contributions due to groundwater infiltration (including private sources), rainfall derived infiltration and inflow, and river or lake stage induced infiltration and inflow. Collection system response to equivalent precipitation events will increase when certain environmental conditions such as frozen ground, high antecedent soil wetness, high groundwater, ripe snowpack, and fallow vegetation occur. Separate sewers systems respond not only the one day storm intensity but to the extended rainfall patterns that allow saturation and increase the likelihood of groundwater infiltration and river or lake stage induced infiltration/inflow. Collection system response will vary from community to community and within communities based on age of the sewer system, soil type, construction materials and installation practices, condition of private laterals, prevalence of foundation drain and down spout connections, and other factors.

The response of a wastewater collection system to varying precipitation and climatic conditions can be developed using deterministic or statistically-based models provided climate and flow data are available for a sufficiently long period of record. Once such a model has been calibrated and verified, long term climate data can be used to estimate long-term performance at the wastewater collection and treatment systems. Such models do not account for SSOs caused by conditions such as power outages, vandalism, sewer collapse, equipment failure, line blockages and accidents. Simplified

methodology for small systems should be available so as not to impose an unreasonable burden on those systems.

Exceptional events can then be defined as those with a small probability of occurring. What is considered a "small" annual probability of occurrence varies widely. It may range from 5 to 50 percent which corresponds to a recurrence interval range from 2 to 20 years. Exceptional events also include SSOs caused by factors that cannot be predicted by models such as power outages, vandalism, sewer collapse, equipment failure, line blockages and accidents.

5. How should EPA address peak flows at POTW treatment plants?

EPA should develop a policy that recognizes holistic operation of the collection and treatment system to minimize public health risk or other environmental impacts. Diversion of peak flows at POTWS following primary treatment to protect the biological process with recombination and disinfection, provision of high rate physical-chemical treatment or other means is being employed by numerous utilities. Peak flow management strategies typically achieve secondary treatment standards with successful disinfection as measured by indicator organisms. WEF's "Guide to Managing Peak Wet Weather Flows in Municipal Wastewater Collection and Treatment Systems" outlines a sound approach for analyzing collection and treatment system performance during wet weather conditions and develops a sound approach to incorporating wet weather management practices through facility planning, design and operation. We wish to note that in many instances high rate processes are not required to meet the applicable water quality and wastewater effluent standards because the discharges occur during periods when the receiving water is not at low flow conditions. Standard rate treatment options may in many instances provide sufficient treatment or if the flows are significantly greater than the average day design flow (e.g. 5 to 1 to 6 to 1) meet the requirements for secondary effluent as it enters the POTW. The 85% removal requirement was originally intended to apply to average day treatment conditions. We believe that the 85% removal requirement should only be applied over a longer period of time, perhaps annually.

Examples of permitted blending in Wisconsin are as follows:

Illinois has incorporated peak excess flow treatment with the requirement that secondary treatment effluent limits plus disinfection be achieved while using blending to treat excess wet weather flow. Several Illinois utilities have operated under permits that define flow conditions under which blending is to be utilized as a management practice. Permits have been issued in Illinois since the 1970's with Region 5 approval. Those utilities that treated excess wet weather flows through diversion around primary treatment and recombination with disinfection are unaware of any public health or adverse environmental impacts associated with the discharge of blended flow.

POTWs may be required to achieve greater nutrient removal than is the current performance. Peak flow management strategies will be even more important as these processes are added and POTWs should have effective options to meet

multiple environmental objectives. Initial WERF research indicates that peak wet weather flow blending is effective in managing public health risk. Further study would be useful to allow POTWs to refine their excess peak flow treatment practices to optimize public health protection.

6. What are the costs and benefits of CMOM programs and asset management of sanitary sewers?

A CMOM Program helps the POTW and satellite communities shift from a reactive mode of operation to a proactive mode. An effective CMOM Program helps managers to properly budget for O&M activities and fund their capital projects. A CMOM Program should be specific to each community to ensure that their assets are properly protected. We recommend using the CMOM principles as outlined in the WEF /NACWA "Core Attributes of Effectively Managed Collection Systems". CMOM programs as permit requirements in Wisconsin are a

relatively recent and there is not sufficient data to evaluate costs and benefits. The following describes the experience of a regional wastewater utility in Wisconsin.

A CMOM program or requirement is a good way to document good collection system practices. Providing automatic standby emergency generators at lift stations have helped immensely at locations that experience power outages due to lightning strikes. In the past these power interruptions led to bypassing at locations in collection systems. Maintenance of these generators is necessary and monthly testing insures they are operational when needed. SCADA systems can handle and monitor the performance of these generators with little human interaction. Alarms are reported to the POTWs and work orders for service can be generated to insure operability when needed. Investments in other backup systems such as back up floats and level monitoring, and redundant control systems also insure reliability. Reliable system management through a CMOM program has led to less SSOs because the entire system has a much higher reliability. In many cases a good mechanic and electrician from a POTW can be utilized to make sure the collection system operates at a reliable level. CMOM provides a level of accountability that forces compliance because someone is watching and looking over what is being done to insure reductions in SSOs.

Asset management aspects of a CMOM program are also good in order for collection system supervisors to raise a level of attention to their needs when commissions and governing bodies are looking for programs to cut such as sewer televising or cleaning. The graph below shows a

Facility	Average Design Flow (mgd)	Peak Hourly Flow (mgd)	Treatment	Frequency of Use
A	1.8	18	Primary Treatment and Disinfection	Once Every 3 to 5 years
B	4.5	30	Primary Treatment-Disinfection is not required in their permit	Never used in 10 years due to available storage in existing structures
C	9.8	60	Enhanced Primary Treatment, Storage and Disinfection	Twice per Year in wet years with no use in drier years
D	12.5	50	Enhanced Primary Treatment and Disinfection	5 times in 10 years
E	10	110	Primary Treatment and Disinfection	
F	50	140	Primary Treatment and Storage	Once every 3 to 5 years depending on extended rainfall patterns



Aqua Backflow

Protecting your water supply from contamination®

- Program Management
- Site Inspections
- Consultations
- Ordinance Review
- Mailed Surveys
- EPA Licensed & Certified

Backflow Preventer Tracking for only \$30 a month!

- Database creation included
- Compliance letters included
- Assembly tracking included
- Tester & kit tracking included

866-777-2124 866-777-2125 fax

Cross connection control management services for municipal and private water suppliers

www.AquaBackflow.com

trend line of SSOs at a regional Midwest collection system. While some declines and rises can be attributed to weather patterns, a good CMOM program helps communities program the proper resources to meet the needs in a community.

7. Are there other considerations?

Different size collection and treatment systems have different financial and technical resources. Flexibility should be incorporated into updated regulations and guidance so that small communities may develop a management program that is able to be implemented and provides the management tools appropriate to their facilities. In order to be fair to satellite and host communities of regional POTWs, consistent practices and policies need to apply to all contributors of a POTW. Permitting of each collection system is recommended so that a regional POTW (who has very little enforcement capability) is not held responsible for a SSO when they have little regulatory authority over another government entity. In that case a State or federal agency should weigh in with regulations that need to be followed.

The implementation schedule for developing and implementing a CMOM Program needs to be realistic.

A significant source of infiltration and inflow (I/I) is from private property such as laterals. Currently, certain types of funding are not available to use on private property. Consideration to broaden the guidelines to use federal funds on private property for the overall good of the system should be considered. There are many types of programs that utilities have implemented to address private property I/I. A resource for these types of programs can be found on the WEF website at www.wef.org/privateproperty.

Consideration should be given to either a streamlined approach for smaller utilities (facilities serving less than 5,000 persons) that would not dictate complicated approaches in situations where sewer capacity or peak flow at the POTW are a consideration. For example, the based EPA definition of excessive I/I of 120 gpcd for infiltration or 275 gpcd for inflow coupled with a system wide analysis of the estimated infiltration inflow rate (e.g. based on a 2,500 gpd/in-dia/mile) could serve as the basis for determining the need for a more detailed CMOM approach. In addition, specific provisions regarding other causes of sewer related problems (particularly, FOG plugging)

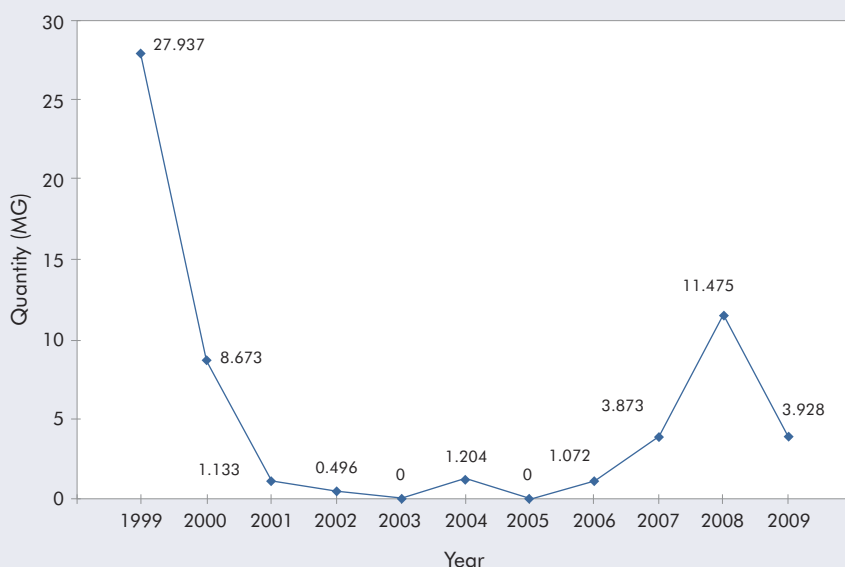
could be addressed through proper operation and maintenance.

As an example in one of our member states, the Compliance Maintenance Annual Reports for Wisconsin requiring reporting issues regarding collection system capacity, operations and maintenance. Poor performance over an extended period could serve as the regulatory basis for including more detailed CMOM requirements in individual permits on an as needed, case by case basis.

Central States WEA thanks U.S. EPA for the opportunity to comment on this

important policy and environmental issue. Our members are committed to best management practices cost-effectively employed to continuously improve and preserve our water environment. Central States WEA will be happy to continue dialogue and assist U.S. EPA with development of an SSO and blending policy that is protective of public health and the environment within a legal framework that is manageable by and provides legal protection to POTWs and their contributing communities. [CS](#)

Overflow Trend 1999-2009



NEENAH, WI
920.751.4200

MACHESNEY PARK, IL
815.636.9590

VALPARAISO, IN
219.462.7743

INNOVATION & TRUST

SINCE 1909

McMAHON
ENGINEERS ARCHITECTS

WWW.MCMGRP.COM



By BETH VOGT and RANDY WIRTZ

Submit for an Award

Water and wastewater professionals working in the water quality industry are often overlooked for our critical role in protecting public health and the environment. A top priority of CSWEA each year is to recognize the efforts of our members and water and wastewater professionals at all levels. We also seek to provide top quality nominees to the Water Environment Federation (WEF) each year for national level recognition. In order for you or a deserving colleague to be recognized, please submit a nomination to the Central States Water Environment Association and/or WEF for one of the many awards available.

Our role in protecting the public and the environment are often undervalued and invisible to the very public that we protect. Whether in design, academia, equipment manufacture and supply, management, or operations, we all know individuals who have successfully addressed unique and challenging issues. Our awards program offers the opportunity to receive recognition for these deserving professionals.

Below is a listing of the award opportunities. Sadly, many awards have few or no nominations each year, resulting in missed opportunities to provide recognition to deserving water quality professionals. It's time to brag a little bit about the accomplishments of our members. Please carefully review the various awards

available and nominate one of our many deserving members.

Please note that award submissions need to be made by December 1, 2010 to allow distribution to the respective CSWEA or WEF Awards Committees for consideration. CSWEA will present the winners with their awards at the 84th Annual Meeting Awards Banquet on May 18, 2011. WEF awards will be presented at WEFTEC 2011, in Los Angeles.

2010 CSWEA & WEF AWARD NOMINATIONS NOW BEING ACCEPTED

Nominations are now being accepted for the following WEF awards and should you be aware of a worthy nominee we ask that you please complete and return the bottom portion of this page for consideration. Note that it is OK to self nominate. Each award is briefly described below and complete information may be found on the www.CSWEA.org or www.WEF.org web sites.

Charles Alvin Emerson Medal: This award is presented by WEF to an individual whose contributions to the wastewater collection and treatment industry most deserve recognition. Areas of involvement include membership growth, water resource protection, improved techniques of wastewater treatment and fundamental research.

Harry E. Schlenz Medal: This award is presented by WEF and recognizes the achievements of an individual outside of the water environment profession, who takes up the banner of environmental public education. This person is typically in the journalism, film or video production field.

Richard S. Englebrecht International Activities Service Award: This award is presented by WEF and recognizes sustained and significant contributions to the furtherance and improvement of the activities of the Water Environment Federation in the international field.

Outstanding Achievement in Water Quality Improvement Award: This award is presented by WEF and CSWEA to the water quality improvement program that best demonstrates significant, lasting and measurable excellence in water quality improvement or in prevention of water quality degradation in a region, basin or water body.

Gordon Maskew Fair Medal: This award is presented by WEF and recognizes worthy accomplishments in the training and development of future sanitary engineers. Nominee must be a WEF member.

Public Education Awards: There are three categories of Public Education Awards: Individual, Member Association and Other.

The Awards are presented by WEF and recognize significant accomplishments in promoting awareness and understanding of water environment issues among the general public, through the development and implementation of public education programs.

George Bradley Gascoigne Medal: This award is presented by WEF to the author(s) of an article, which presents the solution of an important and complicated operational problem within a full-scale, operating wastewater treatment plant, which is appropriately staffed. Article must have been published in a Federation or member association magazine/newsletter during the previous year.

Thomas R. Camp Medal: This award is presented by WEF to a member who demonstrates a unique application of basic research or fundamental principles through the design or development of a wastewater collection or treatment system.

The Phillip F. Morgan Medal: The Morgan Medal is awarded by WEF and recognizes valuable contribution to the in-plant study and solution of an operational problem. A published paper is not required.

The George J. Schroepfer Medal: The Schroepfer Medal is awarded by WEF and recognizes a professional engineer for conceiving and directing the design of a project to achieve substantial cost savings or economic benefit over other alternatives, while achieving environmental objectives.

Member Association Safety Award: This WEF award is presented to a member association to recognize the success of the safety programs in their local wastewater works.

Arthur Sidney Bedell Award: The Bedell is a Federation award that is given annually to one recipient in recognition of outstanding achievement in the sewerage and wastewater treatment works field, as related particularly to the problems and activities of the Member Association. The Bedell award subcommittee selects the nominations, and the award is presented at the CSWEA Annual Meeting.

William D. Hatfield Award: The Hatfield Award is a Federation award given annually to one recipient in recognition of outstanding operation of a wastewater treatment plant. Each State Section may nominate

one person per year and submit it to the Hatfield subcommittee. This award is presented at the CSWEA Annual Meeting.

Operations Award: The Operations Award is a Central States award that is given annually to one recipient in each state. The purpose of this award is to recognize operators of wastewater treatment facilities who are performing their duties in an outstanding manner and our demonstrating distinguished professionalism. The States Sections' Committee makes the selection and each State Section winner will receive their award at the CSWEA Annual Meeting.

Radebaugh Award: The Radebaugh Award is given to the author of a deserving paper presented at the previous year's annual meeting. The Radebaugh award subcommittee selects the winner from nominations received and the award is presented at the CSWEA Annual Meeting.

Academic Excellence Award: The Academic Excellence Award is given to one student per year from each eligible institution in the state section hosting the Annual Conference (Minnesota is hosting

PROCESS EQUIPMENT REPAIR SERVICES - Our name says it all.

Our team provides equipment repair and rebuild services to the water and wastewater treatment industry. With over 30 years of experience, our staff has installed, rebuilt and/or repaired the following equipment:

- Mechanical Bar Screens
- Conveyors
- Grit Removal Systems
- Clarifiers
- Aeration Equipment
- Trickling Filters
- Digesters
- Flocculators
- Sand Filters
- Screw Pumps
- Airlift Pumps
- Trash Rakes
- Traveling Water Screens
- Floatation Thickeners
- And More.

We offer professional guaranteed service. We will provide a quotation including equipment requirements and a firm price for the project.

Our customized services allow you the option of having our trained staff work with your personnel to provide total turnkey service to complete your equipment installation, repair, or rebuild needs on a timely, competitively priced basis.

Contact Process Equipment Repair Services today, for all your equipment needs!

Phone 262-629-1059 • Cell 414-412-4403 • Fax 262-629-1059
Email PERSLaMont@aol.com

5991 Division Rd. • West Bend, WI 53095

**Process
Equipment
Repair
Services, Inc.**

the next conference.). An eligible institution shall be a college or university having a recognized graduate or undergraduate program in engineering as accredited by the Accreditation Board for Engineering and Technology. The candidate shall be selected by the Department Chairman or other designated person at the eligible institution. Selected candidates are able to attend the CSWEA Annual Meeting with expenses paid, to receive their award and scholarship.

Collection System Award: This Award is given annually to one member from each section in recognition of outstanding contributions in advancing collection system knowledge and direct or indirect improvement in water quality. Each State Section Collection System Committee can nominate one individual per year with the selected candidate receiving the award at the CSWEA Annual Meeting. The recipient of the Association Award shall be nominated annually for the WEF Collection System Award.

George W. Burke Safety Award: The Burke Award is made annually by WEF to a municipal or industrial wastewater facility for promoting an active and

effective safety program. Each State Section Committee can nominate a facility and the nominations are then sent to the general awards committee. The winner will be presented with the Burke Safety Award at the CSWEA Annual Meeting.

Central State Section Safety Award: The CSWEA Facility Safety Award is made annually by CSWEA to a municipal or industrial wastewater facility within each State Section in recognition of active and effective safety programs from Burke Award submissions and the awards are presented at the CSWEA Annual Meeting.

Industrial Environmental Achievement Award: The award is given at the CSWEA Annual Meeting to one industry per year in recognition of outstanding contributions in waste minimization, pollution prevention, environmental compliance and environmental stewardship. Each State Section Industrial Committee may nominate one facility per year.

Lab Analyst Excellence Award: This is a WEF award that is given annually to one recipient in recognition of outstanding achievement in the area of water quality analysis. Each State Section Laboratory

Committee may nominate one person. This award is presented at the CSWEA Annual Meeting.

Industrial Environmental Achievement Award: The award is given to one industry per year at the CSWEA Annual Meeting in recognition of outstanding contributions in waste minimization, pollution prevention, environmental compliance and environmental stewardship.

Bill Boyle Educator of the Year Award: This award is given to one teacher per year in recognition of outstanding education assistance to students of any level in the study of the water environment. The award is presented at the CSWEA Annual Meeting.

CSWEA Outstanding Young Professional Award: This award recognizes the contributions of young water environment professionals for significant contributions to CSWEA and to the wastewater collection and treatment industry at the CSWEA Annual Meeting.

Additional information on these awards is located at www.CSWEA.org, www.WEF.org, or by contacting Eric Lecuyer, 815-954-2714, cswea@ymail.com. [CS](#)

To submit nominations for any award, please complete and submit the following information to Beth Vogt by e-mail, fax or regular mail

to: BETH VOGT
Greeley and Hansen
100 S. Wacker Drive, Suite 1400, Chicago, IL 60606
Phone: 312-578-2321 Fax: 312-558-1986 E-mail: bvogt@greeley-hansen.com

Nominations must be received no later than December 1, 2010 for consideration.

Award name: _____ Nominee: _____

Nominee contact information (include as much info as possible):

Employer name: _____

Phone #: _____ Email address: _____

WEF member ID: _____ Other: _____

Please provide a brief description of your nominee's qualifications for the award: _____

Your name: _____ (it's OK to nominate yourself)

Your contact information:

Phone #: _____ Email address: _____

Other: _____

The BENEFITS of Membership in CSWEA



You'll benefit personally and professionally by joining CSWEA:

- ✓ By keeping current on technical developments.
- ✓ By keeping current on regulatory developments.
- ✓ By networking with like professionals.
- ✓ Gain sales and marketing contacts by advertising, exhibiting and one-on-one contacts.
- ✓ Enhance relationships with regulatory agencies, and their personnel.
- ✓ Create opportunities to make a contribution to more effective water environment activities.
- ✓ Take advantage of opportunities for publication in our magazine *Central States Water* as well as WEF publications.
- ✓ Learn and practice leadership by becoming an officer, serve on association and state section boards, committees, etc.
- ✓ Opportunities to present papers at state section and association (three-state) conferences and seminar.
- ✓ Social interaction with all environmental professionals involved.
- ✓ Opportunities for cost-effective continuing and advanced education for both professional engineers and operator recertification.
- ✓ Support by people engaged in like activities.
- ✓ Gain professional recognition and personal development.

GOALS

The objectives of CSWEA are to:

- ✓ Advance the fundamental knowledge of the water environment, its basic qualities, and physical laws governing its interaction with other aspects of the environment and with the aesthetic,

economic and biological needs of the earth's inhabitants.

- ✓ Advance the knowledge and technology in the design, construction, operation and management of water quality systems and facilities.
- ✓ Increase the knowledge and understanding of the earth's water environment, and encourage and promote action necessary for its enhancement.
- ✓ Develop and implement effective delivery mechanisms to rapidly disseminate knowledge concerning the water environment to members and other interested parties.
- ✓ Promote sound policy in matters relating to the water environment.
- ✓ Improve the professional status of all personnel engaged in any aspect of protecting and improving the earth's water environment.
- ✓ Strengthen and build alliances with organizations throughout the

world incorporating members of all professions dedicated to the preservation and enhancement of water quality and water resources.

- ✓ Stimulate public awareness of the relationship of water resources to the public welfare and the need for pollution prevention, resource recovery, preservation, conservation, and reuse of water resources.
- ✓ To provide a regional (Illinois, Minnesota, Wisconsin) organization offering multiple opportunities for the exchange of water environment knowledge and experiences among its members and the public and to foster a greater awareness of water environment achievements and challenges.
- ✓ Serve the international community of water environment professionals.
- ✓ To support and encourage activities and programs within the three states as developed by the members and committees of the State Sections.

COMPACT cabinetcooler
Heat Exchangers by Noren Products
for **sealed electrical enclosures**

remove waste heat while keeping contaminants out

- low maintenance
- easy installation
- hazardous location
- below ambient cooling
- stainless steel

GSA GS-07F-0619W ISO 9001:2008

norenproducts.com/cww 650.322.9500



The **BENEFITS** of Membership in CSWEA



NETWORKING OPPORTUNITIES

CSWEA activities allow members to establish contacts within their communities, whether facility operators and managers or consulting engineers and ask for counsel and advice on work situations in the water environment field. Attending association functions can provide members with career opportunities.

OUR MEMBERS


CSWEA members include civil, design and environmental engineers; biologists, chemists, local and state government officials, treatment plant managers and operators, laboratory technicians, students, professors, lawyers, environmental scientists, safety and maintenance professionals and equipment manufacturers and distributors.

OUR VISION

To provide a Water Environment Federation (WEF) organization (Illinois, Minnesota, Wisconsin) offering multiple opportunities for the exchange of water quality knowledge and experiences among its members and the public and to foster a greater awareness of water quality achievements and challenges.

JOIN NOW

CSWEA offers membership in Central States and the Water Environment Federation, (WEF), and this membership category offers the best value for professionals with the state, regional, national and worldwide connections of both a local WEF Member Association (CSWEA) and the preeminent organization of water professionals, worldwide, WEF. Several membership categories are available and described within the membership application.

CSWEA also offers an Associate level membership, which provides membership in CSWEA only for those who may just interested in CSWEA membership. While we strongly suggest membership in both CSWEA and WEF, we understand that for some, membership in CSWEA only makes the most sense. 

IPMC the key to a Digital Nervous System

Data Collection
Process Intelligence
Predictive Maintenance
Energy Management
Benchmarking Tools
Security & Surveillance



Integrated **P**lant **M**anagement and **C**ontrol from



IntelliSys Information Systems

800 347-9977 www.intellisys-is.com

Any idea who is taking care of your analytical lab work?



Northern Lake Service has been a Trusted name for analytical services For over 35 years.

- Wastewater & Sludge Analysis
- Ultra-Low Level Mercury by EPA1631E
- Complete Drinking Water Analysis

1-800-278-1254

www.nlslab.com



Northern Lake Service, Inc.

Call our professional staff
Today for your next project.

To learn more
about CSWEA
and the benefits of
membership, visit
www.cswea.org



Wastewater Diving

By Cheryl Parisien

At first glance, it would seem like diving and wastewater don't mix.

Quite often, system operators do not consider using divers when it comes time to repair or maintain systems. However, using divers can be a cost-effective alternative to taking the system off-line and draining and pumping. "We dive in clarifiers, aeration basins, repair trash racks, piping – a little bit of everything," says Randy Jacobs, president of Pro-Dive Inc.

Diving in wastewater means working in zero visibility where the work is done by feel. Therefore, the diver must understand the chemistry of wastewater and the mechanics of treatment. Divers can also face thermal issues in wastewater, especially in industrial settings, says Jacobs. "The water can be quite hot, so the diver can get very fatigued unless you take steps to keep him cool."

Aside from system maintenance and repair, zebra mussel control is another application for divers, although zebra mussels are not as large a concern as they were a decade ago. "Most water intakes in Lake Michigan have installed chemical feed systems to control zebra mussel infestations, but we do annual maintenance," says Jacobs. His company also removes dispersing rings in the fall, and reinstalls them in the spring.

Divers complete inspections using a variety of techniques, including underwater

photography and video documentation, tactile and visual inspections, and destructive and non-destructive testing. In recent years, Pro-Dive has incorporated some high-tech options like robots, or ROVs, which can be inserted in pipelines to inspect interiors. "Hydrographic surveying and sonar systems have come a long way, and they aid in locating structures and assessing the conditions remotely," says Jacobs. "Often, utilities don't yet know what the problem is, so it is helpful to put a diver in and he can diagnose the problem, usually in short order, and he can sometimes come up with a repair."



Photos courtesy Pro-Dive Inc.



PRO-DIVE, INC.

Underwater Contractors

501 Illinois Avenue Ottawa, Illinois 61350
Phone (815) 433-5228 Fax (815) 434-2433

Potable Water and Wastewater Inspections/Cleaning/Repairs

Randy Jacobs
President
www.pro-dive.net

24-HR SERVICE
Toll Free (888) 505-DIVE
e-mail: info@pro-dive.net

Wastewater Diving



CRISPELL-SNYDER, INC. PROFESSIONAL CONSULTANTS

Clearly your best choice.

Providing cost-effective and community-specific water solutions since 1979.



Lake Geneva
Milwaukee Regional
Madison
Racine
Fox Valley

800.203.7700

www.crispell-snyder.com

Facilities planning
Collection & treatment
Inflow/infiltration studies
Lift stations
Drinking water supply & treatment


Potable water applications

Professional divers also work in potable water, cleaning tanks, maintaining infrastructure, and the like.

Certified commercial divers can inspect water storage tanks, towers and clearwells without draining them or taking them out of service. The diver is encapsulated (no part of the divers body touches the water) in a sealed drysuit and then washed down with a 200ppm chlorine solution before entering the tank. All diving dress is used exclusively in drinking water, to avoid contamination, in compliance with American Water Works Association (AWWA) standards. The diver is then able to move about the tank to perform inspections or clean. Using a specially equipped pump or airlift system the diver is able to remove the sediment from the tank floor. Everything that is loose is removed without damage to painted surfaces. This allows the chlorine in the system to work effectively.

This process is an effective way to clean and inspect potable water storage tanks because all of the maintenance can be done while the tank remains in service and full of water and most of the interior surfaces of the tank can be easily accessed.

"It's a different technique than in wastewater, because in wastewater you have to isolate the diver from the contaminants in a sealed suit, and in potable water the diver is treated as a contaminant where he has to be isolated and all the equipment disinfected before entering the water," says Jacobs.

There are many benefits to using commercial divers in the water industry, and wastewater is no exception. It seems they do mix, after all. 




Replacement Pumps & Component Parts

L&S Electric offers replacement parts to fit most municipal sewage and water pumps, including:

- Fairbanks Morse
- Allis Chalmers
- Aurora
- Chicago
- Crane Deming
- De Laval
- Morris, Smith & Loveless
- Flowserve
- Yeomans

Over 50 Trucks from 13 Locations Serving You in Wisconsin, Minnesota, Illinois, and Michigan's UP

800.283.8332 • www.lselectric.com



2010 CSWEA Buyers' Guide

Welcome to the annual *Central States Water Buyers' Guide*. When making purchasing decisions about products and services in the wastewater industry throughout the Central States region, please support the companies whose advertising makes *Central States Water* possible.

Our CSWEA Buyers' Guide consists of **two sections**:

1. A **CATEGORICAL LISTING** of products and services, including a list of companies which provide them.
2. An **ALPHABETICAL LISTING** of the companies appearing in the first section. This listing includes name, contact info, website, and more.

LISTINGS BY CATEGORY

AMR, AMI, MDM
Master Meter, Inc.

**BACKFLOW
PREVENTER TESTING**
Alden Pool and Municipal Supply Co.

**BIOGAS
CONDITIONING SYSTEMS**
Unison Solutions, Inc.

BLOWERS
Berryman Equipment Company

**CHEMICAL PROCESSING
& FEED SYSTEMS**
Alden Pool and Municipal Supply Co.
Boerger, LLC
Crane Engineering
Force Flow
Pollard Water
Sewern Trent Services

**COATINGS, LINING &
CORROSION CONTROL**
Crane Engineering
ECO Oxygen Technologies, LLC
KLM Engineering, Inc.
SpectraShield Liner Systems

**COMPUTER SOFTWARE/
HARDWARE**
IntelliSys Information Systems

CONTINUING EDUCATION
University of Wisconsin-Madison

CONTRACTORS
Aqua Backflow, Inc.
DYK, Inc.
Process Equipment Repair Services
Pro-Dive Inc.

**CROSS CONNECTION
CONTROL**
Aqua Backflow, Inc.

**CSO/SSO CONTROLS,
WATER RESOURCES,
DISTRIBUTION & COLLECTION**
Crispell-Snyder, Inc.
Donohue & Associates, Inc.
Greeley and Hansen
Infilco Degremont, Inc.
John Meunier Inc.
Smith & Loveless Inc.
Strand Associates, Inc.
Symbiont, Inc.

DECHLORINATION
Pollard Water

DESIGN/BUILD
McMahon

DIFFUSED AERATION SYSTEMS
ITT Sanitaire

DIGESTER GAS SAFETY
Shand & Jurs,
an L&J Technologies Company

**ELECTRICAL,
INSTRUMENTATION/
CONTROLS/GENERATORS**
Advanced Engineering and
Environmental Services, Inc.
ControlSoft Inc.
Donohue & Associates, Inc.
Energenics
IntelliSys Information Systems
ITT Water & Wastewater/
Flygt Products
L&S Electric, Inc.
McMahon
Noren Products
Symbiont, Inc.
USEMCO

ENGINEERS/CONSULTANTS
Advanced Engineering and
Environmental Services, Inc.
AECOM
Aqua Backflow, Inc.
Bolton & Menk, Inc.
Bonestroo
Clark Dietz, Inc.
Crispell-Snyder, Inc.
Donohue & Associates, Inc.
Foth Infrastructure &
Environment, LLC
Greeley and Hansen
Howard R. Green Company
KLM Engineering, Inc.
McMahon
Northern Lake Service, Inc.
Ruekert/Mielke

SEH
Strand Associates, Inc.
Symbiont, Inc.
TKDA
Trotter and Associates, Inc.
WSB & Associates, Inc.

**ENVIRONMENTAL
ANALYTICAL LABS**
Northern Lake Service

**EQUIPMENT REPAIR
& REHABILITATION**
Process Equipment Repair Services

FILTER MEDIA
Anthrafilter (U.S.) Inc.
Mulcahy Shaw Water

FILTER MEDIA INSTALLATION
Anthrafilter (U.S.) Inc.
Alden Pool and Municipal Supply Co.

FILTER MEDIA REMOVAL
Anthrafilter (U.S.) Inc.

FILTRATION
Anthrafilter (U.S.) Inc.
Energenics
Infilco Degremont, Inc.
Kruger Inc.
Mulcahy Shaw Water
Rain for Rent
Sewern Trent Services
Smith & Loveless Inc.

FINANCIAL SERVICES

Advanced Engineering and
Environmental Services, Inc.
Ruekert/Mielke

FIRE HYDRANT FLOW TESTING

M.E. Simpson Co., Inc.

FLOW MEASUREMENT & TESTING

M.E. Simpson Co., Inc.

FRP DOORS & GRATING

Van Bergen & Markson, Inc.

GENERAL INDUSTRIAL

Infilco Degremont, Inc.
ITT Water & Wastewater/
Flygt Products
Noren Products

GEOGRAPHIC INFORMATION SYSTEMS

Advanced Engineering and
Environmental Services, Inc.
AECOM
Bolton & Menk, Inc.
Bonestroo
Crispell-Snyder, Inc.
Howard R. Green Company
McMahon
Ruekert/Mielke
Symbiont, Inc.
WSB & Associates, Inc.

GPS LOCATING & CAD MAPPING

M.E. Simpson Co., Inc.

GRIT REMOVAL SYSTEMS

Smith & Loveless Inc.

HEAT EXCHANGERS/COOLERS

Noren Products

INSPECTOR/LOCATORS

Aqua Backflow, Inc.
KLM Engineering, Inc.
Pollard Water
Pro-Dive Inc.

LABORATORIES/SUPPLIES

Northern Lake Service
Pollard Water

LEAK SURVEYS

M.E. Simpson Co., Inc.

LIFT STATIONS

Oldcastle Precast

MANHOLE REHAB

SpectraShield Liner Systems

METER READING SYSTEMS

IntelliSys Information Systems
Master Meter, Inc.

METERS/METER TESTING

M.E. Simpson Co., Inc.
Master Meter, Inc.

ODOR CONTROL SOLUTIONS

ECO Oxygen Technologies, LLC
Kruger Inc.
LAI, Ltd.
Severn Trent Services
Strand Associates, Inc.

OPERATION SERVICES

Bolton & Menk, Inc.
Bonestroo
McMahon
Process Equipment Repair Services
Pro-Dive Inc.
Ruekert/Mielke
Severn Trent Services

PIPE & APPURTENANCES

John Meunier Inc.
Rain for Rent

PROCESS CONTROL SOFTWARE

ControlSoft Inc.

PROCESS MECHANICAL

Berryman Equipment Company
Donohue & Associates, Inc.
John Meunier Inc.
Mulcahy Shaw Water
Process Equipment Repair Services

PUMPS/PUMP SYSTEMS

Boerger, LLC
Crane Engineering
Energenecs
ITT Sanitaire
ITT Water & Wastewater/
Flygt Products
L&S Electric, Inc.
LAI, Ltd.
Metropolitan Industries, Inc.
Noren Products
Pollard Water
Rain for Rent
SEH
Smith & Loveless Inc.
Symbiont, Inc.
USEMCO
Van Bergen & Markson, Inc.

RESIDUALS/WASTE MANAGEMENT

Boerger, LLC
Infilco Degremont, Inc.
Kruger Inc.

ROTATING APPARATUS REPAIR

L&S Electric, Inc.

SAFETY PRODUCTS

Shand & Jurs,
an L&J Technologies Company

SEPTAGE RECEIVING FACILITY

LAI, Ltd.

STORAGE TANKS/ RESERVOIR SYSTEMS

Boerger, LLC
Crispell-Snyder, Inc.
DYK, Inc.
Energenecs
John Meunier Inc.
KLM Engineering, Inc.
Rain for Rent
SEH
Strand Associates, Inc.

SURVEYS

Advanced Engineering and
Environmental Services, Inc.
AECOM
Bolton & Menk, Inc.
Bonestroo
Howard R. Green Company
WSB & Associates, Inc.

TANKS, WATER AND WASTEWATER

DYK, Inc.

U/W DIVER & ROV INSPECTION

Pro-Dive Inc.

VALVE ASSESSMENT

M.E. Simpson Co., Inc.

VALVES

Advanced Valve Technologies
Crane Engineering
J&S Valve and Manufacturing –
AWWA Gate Valves
John Meunier Inc.
LAI, Ltd.
Metropolitan Industries, Inc.
Shand & Jurs,
an L&J Technologies Company

WATER HARVESTING SYSTEMS

Metropolitan Industries, Inc.

WATER QUALITY MONITORS

Force Flow
Mulcahy Shaw Water
Rain for Rent
SEH
Severn Trent Services

WATER STORAGE CLEANING

KLM Engineering, Inc.

WATER TREATMENT CHEMICALS

Alden Pool and Municipal Supply Co.
Force Flow
Hawkins, Inc.
PVS Technologies
Ruekert/Mielke

WATER/WASTEWATER PUMP STATIONS

USEMCO

WATER/WASTEWATER TREATMENT SYSTEMS

Advanced Valve Technologies
Anthrafilter (U.S.) Inc.
Alden Pool and Municipal Supply Co.
Boerger, LLC
Bolton & Menk, Inc.
Bonestroo
Clark Dietz, Inc.
Crane Engineering
Crispell-Snyder, Inc.
Donohue & Associates, Inc.
ECO Oxygen Technologies, LLC
Energenecs
Force Flow
Greeley and Hansen
Hawkins, Inc.
Howard R. Green Company
Infilco Degremont, Inc.
ITT Water & Wastewater/
Flygt Products
Kruger Inc.
LAI, Ltd.
Metropolitan Industries, Inc.
Mulcahy Shaw Water
Noren Products
SEH
Severn Trent Services
Smith & Loveless Inc.
Strand Associates, Inc.
Symbiont, Inc.
Van Bergen & Markson, Inc.
WSB & Associates, Inc.



BLACK & VEATCH
Building a world of difference.®

MILWAUKEE 414-223-0107
CHICAGO 312-346-3775
MINNEAPOLIS 952-545-6695
weknowwater@bv.com www.bv.com

Illinois
Bloomington
Normal
Peoria
Pontiac
Champaign
Effingham
Shorewood
Chicago



Water treatment, storage & distribution
Wastewater collection & treatment
Stormwater management
Integrated controls systems
Funding assistance

www.f-w.com

ALPHABETICAL LISTING

Advanced Engineering and Environmental Services, Inc.

Water Tower Place
Business Center
6901 E Fish Lake Rd., Ste. 184
Maple Grove, MN 55369
763-463-5036
Grant.Meyer@ae2s.com
www.ae2s.com

**Advanced Valve Technologies**

800 Busse Rd.
Elk Grove Village, IL 60007
847-364-3700
avtkev@aol.com
www.avtfittings.com



Advanced Valve Technologies, Inc.

AECOM

303 E. Wacker Dr., Suite 600
Chicago, IL 60601
920-451-2719
jim.chaffee@aecom.com
rusty.schroedel@aecom.com
www.aecom.com

Alden Pool and Municipal Supply Co.

65910 267th Street
Alden, MN 56009
800-253-7235
Johnsyzmanski99@hotmail.com
www.aldenpool.com

Anthrafilter (U.S.) Inc.

4992 Sweet Home Rd.
Niagara Falls, NY 14305
716-285-5680
swilley@anthrafilter.net
www.anthrafilter.net

Aqua Backflow, Inc.

977 Elizabeth Street
Elgin, IL 60120
847-742-2296
tom@aquabackflow.com
www.aquabackflow.com

Boerger, LLC

740 NE Harding St.
Minneapolis, MN 55413
612-435-7300
info@boerger.com
www.boerger.com

**Bolton & Menk, Inc.**

1960 Premier Dr.
Mankato, MN 56001
507-625-4171
hermandh@boldton-menk.com
www.boldton-menk.com

Bonestroo

2335 W. Hwy. 36
St. Paul, MN 55113
651-636-4600
jim.miller@bonestroo.com
www.bonestroo.com

Clark Dietz, Inc.

5017 Green Bay Rd., Ste. 126
Kenosha, WI 53144
262-657-1550
John.boldt@clark-dietz.com
www.clark-dietz.com

Crane Engineering

707 Ford Street
Kimberly, WI 54136
920-733-4425
m.baxter@craneengineering.net
www.craneengineering.net

**Crispell-Snyder, Inc.**

700 Geneva Pkwy, PO Box 550
Lake Geneva, WI 53147
262-348-5600
marketing@crispell-snyder.com
www.crispell-snyder.com

Donohue & Associates, Inc.

3311 Weeden Creek Rd.
Sheboygan, WI 53081
920-208-0296
mgerbitz@donohue-associates.com
www.donohue-associates.com

**DYK Inc.**

PO Box 696
El Cajon, CA 92022-0696
619-440-8181/800-227-8181
dykinc@dyk.com
www.dyk.com

**ECO Oxygen Technologies, LLC**

3939 Priority Way South Dr.
Ste. 400
Indianapolis, IN 46240
317-706-6484
mmohlenbrink@eco2tech.com
www.eco2tech.com

Energenecs

W59 N249 Cardinal Ave.
Cedarburg, WI 53012
262-377-6360
larry@energenecs.com
www.energenecs.com

Force Flow

2430 Stanwell Dr.
Concord, CA 94520
800-893-6723/925-686-6700
info@forceflow.com
www.forceflow.com

Foth Infrastructure & Environment, LLC

Lincoln Center II, 2514 South
102nd Street, Suite 278
West Allis, WI 53227
414-336-7900
Greg.Bolin@Foth.com
www.Foth.com

**Greeley and Hansen**

100 S. Wacker Dr., Ste. 1400
Chicago, IL 60606
312-558-9000
www.greeley-hansen.com

Hawkins, Inc.

3100 East Hennepin Ave.
Minneapolis, MN 55413
612-331-6910
keenan.paulson@hawkinsinc.com
www.hawkinsinc.com

**Howard R. Green Company**

2550 University Avenue
St. Paul, MN 55114
319-841-4000
draby@hrgreen.com
www.hrgreen.com

**Infilco Degremont, Inc.**

8007 Discovery Dr.
Richmond, VA 23229
804-756-7600
sylvie.roy@degremont.com
Degremont-Technologies.com

**IntelliSys Information Systems**

P.O. Box 265,
N78 W31401 Kilbourne Rd.
North Lake, WI 53064-0265
262-966-3833/ 800-347-9977
rgrosch@intellisys-is.com
www.intellisys-is.com

ITT Sanitaire

9333 N. 49th St.
Brown Deer, WI 53223
info@sanitaire.itt.com
www.sanitaire.com



ITT

ITT Water & Wastewater/ Flygt Products

8402 W. 183rd St., Ste. A
Tinley Park, IL 60487
708-781-0133
www.ittusa.com

Chicago branch:

N27 W23291 Roundy Dr.
Pewaukee, WI 53072
262-506-2389
steve.lammey@itt.com



ITT

J&S Valve and Manufacturing – AWWA Gate Valves

2323 1st St.
Huffman, TX 77336
281-324-3990
brett@jandsvalve.com
www.jandsvalve.com

J & S Valve

John Meunier Inc.

2209 Menlo
Glenside, PA 19038
215-885-4740
asteele@johnmeunier.com
www.johnmeunier.com



John Meunier

KLM Engineering, Inc.

3394 Lake Elmo Ave. N.
Lake Elmo, MN 55042
651-773-5111
smulhern@klmengineering.com
www.klmengineering.com

Kruger Inc.

401 Harrison Oaks Blvd., Ste. 100
Cary, NC 27513
919-677-8310
krugerincmarketing@veoliawater.com
www.krugerusa.com

Krüger

L&S Electric, Inc.
5101 Mesker St.
Schofield, WI 54476
715-241-3262
dmanney@lselectric.com
www.lselectric.com

LAI, Ltd.
5400 Newport Dr., Ste. 10
Rolling Meadows, IL 60008
847-392-0990
tim@leyassociates.com
www.leyassociates.com

Master Meter, Inc.
101 Regency Parkway
Mansfield, TX 76063
817-842-8000
imacleod@
mastermeter.com
www.mastermeter.com



McMahon
1445 McMahon Dr.
Neenah, WI 54956
920-751-4200
kdennis@mcmgrp.com
www.mcmgrp.com

M.E. Simpson Co., Inc.
3406 Enterprise Ave.
Valparaiso, IN 46383
800-255-1521
salesinfo@mesimpson.com
www.mesimpson.com

Metropolitan Industries, Inc.
37 Forestwood Dr.
Romeoville, IL 60446
815-886-9200
tlaskowski@metropolitanind.com
www.metropolitanind.com

Mulcahy Shaw Water
10144 N. Port Washington
Mequon, WI 53092
262-241-1199
info@mulcahyshaw.com

Noren Products
1010 O'Brien Dr.
Menlo Park, CA 94025
650-322-9500
sales@norenproducts.com
www.norenproducts.com

Northern Lake Service, Inc.
400 North Lake Ave.
Crandon, WI 54520
800-278-1254
aaronk@nlslab.com
www.nlslab.com

Oldcastle Precast
7921 Southpark Plaza, Suite 200
Littleton, CO 80120
888-965-3227
steve.kingsland@
oldcastleprecast.com
www.oldcastleprecast.com
/wastewater

Pollard Water
17515 NE 67th Ct.
Redmond, WA 98052
800-437-1146
info@pollardwater.com
www.pollardwater.com

Pollardwater.com

**Process Equipment
Repair Services**
5991 Division Rd.
West Bend, WI 53095
414-412-4403
perslamont@aol.com

**Process
Equipment
Repair
Services, Inc.**

Pro-Dive Inc.
501 Illinois Ave. (PO Box 663)
Ottawa, IL 61350
815-433-5228
rjacobs@pro-dive.net
www.pro-dive.net

PVS Technologies
10900 Harper Ave
Detroit, MI 48213
800-337-7428
customerservice@
pvschemicals.com
www.pvschemicals.com

Rain for Rent
3404 State Road (Headquarters)
Bakersfield, CA 93308
800-742-7246
info@rainforrent.com
www.rainforrent.com



Ruekert/Mielke
W233 N2080 Ridgeview Pkwy.
Waukesha, WI 53188
262-542-5733
sschultz@ruekert-mielke.com
www.ruekert-mielke.com

SEH
3535 Vadnais Center Dr.
St. Paul, MN 55110
800-325-2055/651-490-2000
rleaf@sehinc.com
www.sehinc.com

Severn Trent Services
3000 Advance Lane
Colmar, PA 18915
215-997-4000
nabboud@severntrentservices.com
www.severntrentservices.com



**Shand & Jurs,
an L&J Technologies Company**
5911 Butterfield Road
Hillside, IL 60162
708-236-6000
jreitz@lstechnologies.com
www.shandandjurs.com



Smith & Loveless Inc.
14040 Santa Fe Trail Dr.
Lenexa, KS 66215
913-888-5201
answers@smithandloveless.com
www.smithandloveless.com



SpectraShield Liner Systems
1494 Pleasant Hill Road
Stoughton, WI 53589
608-219-7969
ronaldcotter@yahoo.com
www.spectrashield.com

Strand Associates, Inc.
910 West Wingra Dr.
Madison, WI 53715
608-251-4843
marketing@strand.com
strand.com

Symbiont, Inc.
6737 W. Washington St., Ste. 3440
West Allis, WI 53214
414-291-8840
Amber.burke@
symbiontonline.com
www.symbiontonline.com

TKDA
444 Cedar St. #1500
St. Paul, MN 55101
651-292-440
jack.griffin@tkda.com
www.tkda.com

Trotter and Associates, Inc.
40W201 Wasco Rd.
St. Charles, IL 60175
630-587-0470
s.trotter@taiengr.com
www.trotterandassociates.com



Unison Solutions, Inc.
5451 Chavenelle Rd.
Dubuque, IA 52002
563-585-0967
tony.schilling@unisonsolutions.com
www.unisonsolutions.com

**University of Wisconsin-
Madison Dept. of Engineering
Professional Development**
432 N. Lake St.
Madison, WI 53706
608-263-4705
paschke@engr.wisc.edu
epd.engr.wisc.edu



USEMCO
PO Box 550
Tomah, WI 54660
608-372-5911
bruhling@usemco.com
www.usemco.com



Van Bergen & Markson, Inc.
8814 Seventh Ave. N.
Minneapolis, MN 55427
763-546-4340
info@vbminc.com

WSB & Associates, Inc.
701 Xenia Ave. S., Ste. 300
Minneapolis, MN 55416
763-541-480
nzeigler@wsbeng.com
www.wsbeng.com

BAXTER & WOODMAN

Consulting Engineers

AN INDUSTRY LEADER in water systems,
storage, distribution, and conservation and
wastewater treatment and conveyance



Serving clients throughout the Midwest
815.459.1260 • www.baxterwoodman.com

Summer Recap

By Eddie McCall

With fall fast approaching, we now begin to see summer in the rear view mirror. Some of us will be glad to see the backside of the blazing heat and rainy months. Illinois and the Chicagoland area experienced record flooding due to the heavy thunderstorm activity this summer, especially in July. Some of us, however, will lament the loss of summer. With the onset of winter comes the other extreme in weather conditions. Soon it will be time to put away the lawnmower and dust off the rake for the leaves and thereafter the snow blower. Happy fall gardening to all.

Not only was there extreme weather during in Illinois, but as always Illinois provided much entertainment on the political front. Act one seems to be over for the former governor with the stage set for Act two or the sequel as Hollywood likes to say. It will be interesting to see how many more acts (or sequels) there will be in this Illinois drama. With the Adams Family exiting the stage, I am sure there will be host of new characters to carry the performance. Grab your popcorn and stay tuned.

In July, we held the Illinois Section meeting at the Glenbard Wastewater Authority. I would like to express many thanks to the folks at Glenbard for hosting the chapter meeting. The meeting highlights were as follows (full meeting minutes will be posted on the CSWEA website at a later date):

- **Shelly Cumbow** provided the treasurer's report. The good news is the State Chapter is financially strong and should be able to maintain this strength going forward.
- **Roger Gyger** provided the public education report and as always, continues to show his commitment to the WEF initiative of Water is Life. Additionally, Roger shared the latest and greatest WEF materials available to all members to help to brand/promote the organization.
- **Mary Dressel** provided the laboratory report. Mary continues to build her program for the upcoming laboratory seminar with the help of her committee. The preview and



discussion at the section meeting tells me it will be a laboratory seminar that no one will want to miss. At this point, I am pleased to welcome **Joe Robinson** (North Shore Sanitary District) as the newest member of Mary's Committee.

• **Mark Eddington** provided the collection system report. Though attendance was down at the recent collections system seminar, on a year-to-year basis, the event proved to be another great success for the chapter. Many thanks to Mark and his group for putting together an

interesting program comprising of more than eight speakers from the regulatory, public, consulting and contracting sectors.

- **Steve Bollweg** provided the operations report. Steve continues to build his program for the upcoming operations seminar to be held at Wheaton Sanitary District in September. A sneak peak of the program highlights includes stormwater management related to construction and operations funding. Mark your calendars for September. Steve will have more details as soon as they are available.
- **Scott Trotter** provided an update on student activities. The University of Illinois and University of Madison are actively engaged in the organization through their involvement in Engineers without Borders and the Student Design competition. Scott is planning to host an exchange for the various student chapters at the Midwest Expo to increase visibility and engagement of students at the upcoming meeting in the Dells, WI.

As always we are looking for new members to join our organization and the various committees of Central States WEA. If you have not considered joining, I would like to extend an invitation for you to do so. There are so many dynamic people in the organization waiting to meet you. Until next time, please accept my sincere appreciation to all of you for taking the time to continue to make this organization successful. CS



CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS

Springfield, IL
Aurora, IL
Chicago, IL
Columbus, OH
Edwardsville, IL
Indianapolis, IN
Peoria, IL
Rockford, IL
St. Louis, MO

*Superior wastewater engineering services
responsive to our clients needs*



www.cmtengr.com

Wet and Wild Weather

By Keith Haas

Recent wet weather events in Central Wisconsin and in Milwaukee in the summer of 2010 will not soon be forgotten. Some of us dodged a bullet and others were inundated with water and phone calls. Sewer systems have simply not been designed to handle the intense rainfall and the corresponding flows we have experienced this past decade. These events have raised the focus on our profession and the work that needs to be done. Hopefully it will lead to additional work for the engineering and construction community in the months and years to come.

CSX '10 was well attended July 15-16 in the Wisconsin Dells at the Kalahari Resort. Members of all three State Sections were present and we discussed a wide variety of issues affecting our organization. Our Section is currently enjoying great membership and attendance at many other fine events and seminars. We recently had our Summer Business meeting and follow-on Young Professionals (YP) and Seasoned Professionals (SP) event at Miller Park. Thank you to Trevor Ghylin and Tom Mulcahy for setting up the event. It is a great chance for the SPs to meet the YPs who will carry the torch of our profession into the next several decades.

The Collection System Northwoods Seminar was held in Marshfield, WI on July 29. Congratulations to the committee leadership of Andrew Craven, Randy Belanger and Todd Stelmacher. We also can't say enough about the efforts of our local arrangers in Marshfield: Jean Coy and Ron Dickrell – fantastic work! If you are a northern Wisconsin operator, engineer or vendor, please plan on attending this collection system seminar next year. There were excellent presentations covering fats, oils



and greases (FOG), septic hauling, directional drilling and confined space entry.

The CSWEA and WWA joint Management Seminar was held at Cabela's again on August 5 in Richfield, WI with excellent attendance and a full schedule of speakers and topics. Managers and professionals were exposed to a series of presentations covering topics like financing your utility and dealing with social networking sites in the workplace. My special thanks go out to Ken Sedmak, Paul Nehm, Tom Krueger, Mike Simon and Pete Conine and as our representatives on this committee.

Our Government Affairs Committee, under the direction of Brandon Koltz, has been extremely active in many legislative and regulatory issues affecting every member of our Section and probably every discharger. Comments were prepared and forwarded to the EPA and DNR with reference to TMDLs and SSOs, CMOM and blending issues that will affect every one of us in the coming years. Thanks to Jane Carlson and Jim Kleinschmidt for their input on this effort.

As we wind down from WEFTEC in New Orleans, we are reminded that our budget for 2011 for the Wisconsin Section will be formulated at our November board meeting this fall. All Section members are welcome and we encourage you to attend as we plan and budget for the following year.

The strength of our organization is in the strong committee structure that we have and the excellent seminars that we sponsor to publicize the good work that we do for the environment and mankind. Keep up the good work and don't forget to "drag someone along" to the next event that you attend. [CS](#)

"Our Section is currently enjoying great membership and attendance at many other fine events and seminars."

Preserving our Most Valuable Resources

PVS Technologies. Delivering superior products with exceptional service, ever mindful of our shared future. As a leading iron salts manufacturer, we simply will accept nothing less.

- **LIQUID FERRIC CHLORIDE**
- **LIQUID FERROUS CHLORIDE**
- **Anhydrous Ferric Chloride / Etchant Grade Ferric Chloride**

10900 Harper Ave. Detroit, MI 48213

PVS TECHNOLOGIES

toll free **800-337-7428**
 dbrandt@pvschemicals.com
www.pvschemicals.com

Find Your Place

By Ted Field

The saying in Minnesota is that we have only two seasons: road construction and winter. It's our way of finding fault with perfect summer weather. And while summer 2010 will be remembered for its warmth and sunshine it will also be remembered for its road closings and detours that at times had drivers surrounded and frustrated. Now it is fall, the roads are opening up, we're home from WEFTEC, and we get to enjoy a brief respite from our complaining before the snow flies.

The Minnesota Section is looking forward to hosting the 84th Annual CSWEA Meeting next May in Brooklyn Park, with the warning to our out-of-state guests that despite what you may have heard about our endless winter's road construction season will have begun.

But before winter arrives this year we're busy conducting our section's business. Jim Miller and Doug Henrichsen attended the annual CSWEA-CSX-YPX event in July at the Wisconsin Dells where they participated in discussions about how CSWEA can advance its mission, increase activity, and grow in member participation. And in late July several members of our section attended the Minnesota Wastewater Operators Association conference in Grand Rapids to celebrate and exchange ideas related to the wastewater industry.

Next for the Minnesota Section will be to co-sponsor with Air and Waste Management our annual Conference on the Environment, this year on Tuesday, November 9, at the Earle Brown Center in Brooklyn Center. This year the conference will feature presentation themes relevant to our times, ranging from asset management to energy conservation. This one-day event is always a highlight for our section as we shift from our fall to winter routines.

As many of you know, our section is participating in the preparation of a documentary called *Liquid Assets* to be aired on public television early next year. Patti Craddock and Alva Rankin are



representing the Minnesota Section on the planning committee working with TPT to produce the documentary, the purpose of which is to alert audiences on the importance of our water infrastructure to our quality of life. The committee continues to move forward with the project, which could benefit from additional financial support from individuals or organizations in our water industry. Check out the project and ways it can be supported at www.blueprintMN.com. Also, look for presentations of the project-in-progress at this year's Conference on the Environment and at our Innovative Conference in February.

The message that I wish to champion is that our section functions best with increased participation from all its members. There is a place and need for everyone to volunteer. Members just need to decide what they want to do and what their talents are. I encourage everyone to find their place in one or more of our organization's many activities.

A while ago I came across a story that speaks to sharing the talents you have.

A psychiatrist, a theologian, and an engineer are deer hunting in the woods when a violent snowstorm comes up suddenly. Wet, cold, deep in the forest, and in need of emergency shelter, they come upon a cabin, unoccupied but locked, but they enter by breaking open the door. Inside it is furnished comfortably. There is plenty of firewood stacked on the porch, and as they haul armloads inside to start up the woodstove they remind themselves to thank the cabin owner with appropriate compensation beyond a simple thank-you note.

They are surprised by the woodstove's location. It sits in the middle of the cabin but hangs several feet above the floor supported by thick wires strung from the ceiling. As they stand underneath and reach up to insert kindling in the stove, they question its peculiar location.

Continued on page 58.



Your wastewater system is a vital part of your infrastructure. TKDA can help you optimize it.

TKDA

ENGINEERING • ARCHITECTURE • PLANNING

The right time. The right people. The right company.

Complete Water and Wastewater Services

FACILITY PLANNING • RATE STUDIES • DESIGN • CONSTRUCTION ADMINISTRATION • OPERATIONS

444 Cedar Street, Suite 1500 | Saint Paul, MN 55101-2140 | (651) 292-4400 | www.tkda.com

Continued from page 57.

The psychiatrist thinks he knows the answer. "The cabin owner put the stove up high for an emotional reason," he says. "He can sit underneath, feel its warmth, and feel like he's returned to the safety and comfort of the womb."

The theologian replies, "No, no, no, it's spiritual. He can sit underneath and look up at the stove as if he's admiring the creator, a power greater than himself."

The engineer shakes his head. "You're both wrong. It's not emotional or spiritual. It's thermodynamic. With the stove off the floor, it heats the room more efficiently. That's all."

As the stove warms up they sit and continue to debate the issue. Unexpectedly, the cabin owner shows up. He accepts their apology for breaking in by saying it's nothing, he's glad to be of help. Then he listens to their various theories on why the stove is hung in the air. They ask which is correct.

"None of them. You're all wrong," he replies. "I put the stove up there because I had more wire than stovepipe."

The story's lesson is to use the talents you have. I tell this story as a preface to inviting all our members to volunteer any way they like. Central States can use your time and talents, whatever they might be. And while our talents are different, our will to share them doesn't have to be. Whether we are rich in wire or stovepipe, our organization needs us. Do and give what you can. Please consider what you would like to do or what your special talents are and contact one of our many officers in the organization with an offer to help out in some way. CS



80 years

Building our track record on
80 years of client satisfaction.

Providing a full range of consulting services!
800.325.2055 • www.sehinc.com
ARCHITECTS | ENGINEERS | PLANNERS | SCIENTISTS

SEH



WWW.SYMBIONTONLINE.COM

Symbiont

Sustainable Water Solutions

Science Engineering Construction

Protect Employees...Protect Nature



Automated PLC/SCADA control of Algae, Grease & Foam
Innovative Green Technology-Re-use water, No Chemicals

WEIRWASHER
AUTOMATED CLEANING SYSTEMS

Clarifier & Thickener
Algae/Grease/Flock Removal
Cleans Around Obstructions,
Supports, & Uneven Surfaces
Of All Tank Designs Using
Plant Re-Use Water pressure
Cleans over 12" underwater

Presenting at the WWOA 2010
Risk Management, Safety and Green Technology
Thursday October 21, 2010 at 8:00 AM
By Dr. Shawna Gill, WEF SSoHC

Eco-Blaster
Biological Control Systems

Scum/Foam/Grease/Debris
Suppression or Cleaning
SBR'S, Feed Wells, Screens
Aeration Basins, MBR
BELT CLEANING
Cascades, Sand Filters
Grease Collection Areas & Pump Stations

www.weirwasher.com
info@gilltrading.com
1-866-447-2496

NOVEMBER**IL Section CSWEA Maintenance and Safety Seminar**

November 2, 2010

City of Naperville – Safety and Training Facility, Naperville, IL

MN Section CSWEA/A&WMA Conference on the Environment

November 9, 2010

Earl Brown Heritage Center, Brooklyn Center, MN

WI Section CSWEA Annual Business Meeting

November 15, 2010

Cabala's, Richfield, WI

JANUARY 2011**CSWEA/IWEA Government Affairs Seminar**

January 2011

Naperville, IL

FEBRUARY 2011**CSWEA/WWA 6th Annual Midwest Water Industry Expo**

February 8 & 9, 2011

Kalahari Resort and Conference Center, Wisconsin Dells, WI

MN Section CSWEA/MWOA Annual Innovative Conference

February 15, 2011

St. Cloud, MN

WI Section Government Affairs Seminar

February 24, 2011

Middleton, WI

MARCH 2011**WI Section Spring Biosolids Symposium**

March 22, 2011

Stevens Point, WI

APRIL 2011**CSWEA YP Leadership Academy**

April 4, 2011

Monona Terrace, Madison, WI

CSWEA 16th Annual Education Seminar

April 5, 2011

Monona Terrace, Madison, WI

MAY 2011**84th CSEWA Annual Meeting**

May 16-19, 2011

Northland Inn, Brooklyn Park, MN

JULY 2011**CSWEA CSX'2011**

July 21-22, 2011

Kalahari Resort and Conference Center, Wisconsin Dells, WI

**PRESERVE THE PAST,
MANAGE THE FUTURE.****PROTECT**
Your Assets.**PRIORITIZE**
Your Spending.**PLAN**
Your Future.

Municipal Economics & Planning specializes in helping communities realize their vision for high-quality infrastructure and services by providing sound fiscal, economic, and planning advice. Whether you need specialized assistance with a particular project, support for ongoing services, or if you are faced with a new or out-of-the-ordinary issue or opportunity—we can help!

Let's work together to **MEET** your **CHALLENGES**,
SHARE your **CONCERNS** and **ACCOMPLISH** your **GOALS**.

**Municipal Economics & Planning***A division of Ruekert-Mielke*
Economic, Fiscal & Planning Consultants for Local Governments**Waukesha** 262.542.5733 • **Kenosha** 262.953.2650 • **Madison** 608.819.2600Visit us on the web at: www.ruekert-mielke.com/MEP**Van Bergen & Markson, Inc.****Van Bergen & Markson, Inc.***A Clear Solutions Technology Company*8814 Seventh Ave. N.
Minneapolis, MN 55427
Phone: 763-546-4340**Van Bergen & Markson, Inc.***A Clear Solutions Technology Company*1049 N. Lynndale Drive, Suite 2B
Appleton, WI 54914
Phone: 920-730-8722**For Both:**

Toll Free: 800-422-0791

Email: info@vbminc.com

"Since 1929, your single source for pumping and process equipment, controls, mixers and technology."

Proudly Representing:

- Alfa Laval/Sharples
- Eimco Water Technologies
- Enviroquip
- Floway Pump
- Fluid Dynamics
- Hallsten Corporation
- Hibon
- ITT A-C, ITT Flygt
- Komline Sanderson
- Moyno, Inc.
- Polychem
- Rodney Hunt
- SP Kinney
- Strongwell
- Turbalex
- Vaughan Pump Co.
- Warminster Fiberglass

COMPANY	WEBSITE	TELEPHONE	PAGE
Advanced Engineering and Environmental Services (AE2S)	www.ae2s.com	763-463-5036	6
Advanced Valve Technologies	www.avtfittings.com	877-489-4909	9
AECOM	www.aecom.com		15
Alden Pool & Municipal Supply Co.	www.aldenpool.com	800-253-7235	37
American Flow Control	www.acipco.com		27
Aqua Backflow	www.aquabackflow.com	866-777-2124	42
Baxter & Woodman, Inc.	www.baxterwoodman.com	815-459-1260	54
Black & Veatch	www.bv.com	312-346-3775 – IL 952-545-6695 – MN	52
Boerger, LLC	www.boerger-pumps.com	877-726-3743	13
Bolton & Menk, Inc.	www.bolton-menk.com	507-625-4171	8
Bonestroo	www.bonestroo.com	651-636-6400	31
CDM	www.cdm.com		33
Clark Dietz, Inc.	www.clark-dietz.com	262-657-1550	18
Crane Engineering	www.craneengineering.net	920-733-4425	32
Crawford, Murphy & Tilly, Inc.	www.cmtengr.com	217-787-8050	55
Crispell-Snyder, Inc.	www.crispell-snyder.com	800-203-7700	50
Degremont Technologies	www.degremont-technologies.com	804-756-7600	11
Donohue & Associates, Inc.	www.donohue-associates.com	920-208-0296	64
DYK Incorporated	www.dyk.com	800-227-8181	2
ECO2	www.eco2tech.com	317-706-6484	20
Energenecs	www.energenecs.com	800-343-6337	38
Farnsworth Group	www.f-w.com	309-663-8435	52
Force Flow	www.forceflow.com	800-893-6723	34
Foth	www.foth.com	800-236-8690	3
Greeley and Hansen	www.greeley-hansen.com	800-837-9779	15
Hawkins, Inc. (Water Treatment Group)	www.hawkinsinc.com	612-331-9100	39
Howard R Green Company	www.hrgreen.com	888-368-4389	16
Intellisys Information Systems	www.intellisys-is.com	800-347-9977	48
ITT Water & Wastewater USA Inc. - Flygt Products	www.flygtus.com	800-661-9944 – IL 800-232-1417 – WI	5
ITT Water & Wastewater USA Inc. - Sanitaire Products	www.sanitaire.com	414-365-2200	63
J & S Valve and Manufacturing	www.JandSValve.com	866-498-4283	25
John Meunier Inc.	www.johnmeunier.com	215-885-4740	29
KLM Engineering, Inc.	www.klmengineering.com	888-959-5111	29
I.Kruger, Inc.	www.krugerusa.com	919-677-8310	17
L&J Technologies Company	www.shandandjurs.com	708-236-6000	12
L&S Electric Inc.	www.lselectric.com	800-283-8332	50
LAI, Ltd.	www.LeyAssociates.com	847-392-0990	39
Master Meter	www.mastermeter.com	817-842-8000	21
McMahon Associates, Inc.	www.mcmgrp.com	920-751-4200	43
Metropolitan Industries, Inc.	www.metropolitanind.com	800-323-1665	19
M.E. Simpson Co. Inc.	www.mesimpson.com	800-255-1521	38
Mulcahy/Shaw Water, Inc.	www.mulcahyshaw.com	262-241-1199	26
Noren Products	www.norenproducts.com	866-936-6736	47
Northern Lake Service Inc.	www.nlslab.com	800-278-1254	48
Oldcastle Precast	www.oldcastleprecast.com/wastewater	888-965-3227	37
Pollardwater.com	www.pollardwater.com	800-437-1146	22
Process Equipment Repair Services, Inc.		262-629-1059	45
Pro-Dive Inc.	www.pro-dive.net	815-433-5228	49
PVS Technologies Inc	www.pvstechnologies.com	313-903-3397	56
Rain for Rent	www.rainforrent.com	800-742-7246	27
Ruekert-Mielke	www.ruekert-mielke.com	262-542-5733	39, 59
Severn Trent Services	www.severntrentservices.com	866-646-9201	35
Short Elliott Hendrickson (SEH)	www.sehinc.com	800-325-2055	58
Smith & Loveless Inc.	www.smithandloveless.com	800-898-9122	35
Spectra Shield Liner Systems	www.spectrashield.com		19
Strand Associates, Inc.	www.strand.com	608-251-4843	28
Symbiont	www.symbiontonline.com	414-291-8840	58
TKDA	www.tkda.com	651-292-4400	57
Trotter & Associates Inc.	www.taiengr.com	630-587-0470	30
Unison Solutions, Inc.	www.unisonsolutions.com	563-585-0967	29
University of Wisconsin-Madison	www.epd.engr.wisc.edu	800-783-6526	3
USEMCO	www.usemco.com	608-372-5911	24
Van Bergen & Markson, Inc.		800-422-0791	59
WeirWasher/Gilltrading.com	www.weirwasher.com	866-447-2496	58
WSB & Associates, Inc.	www.ws beng.com	763.541.4800	36

Central States Water would not be possible without the advertising support of these companies and organizations. Please think of them when you require a product or service. We have endeavored to make it easier for you to contact these suppliers by including their telephone numbers and, where applicable, their websites. You can also go to the electronic version of **Central States Water** at www.cswea.org and access direct links to any of these companies.



CSWEA Associate Membership Application

Contact Information

Last Name	MI	First Name	(Jr., Sr., etc.)
Business Name (if applicable)			
* Business Address * Home Address Street or PO Box			
City	State	Zip	Country
Home Phone Number	Business Phone Number		FAX Number
E-mail Address			

Employment Information

Employer	Job Title
Environmental Focus	Other focus or interest (please specify)
Signature (required for all new memberships)	Date

Associate Membership in Central States Water Environment Association

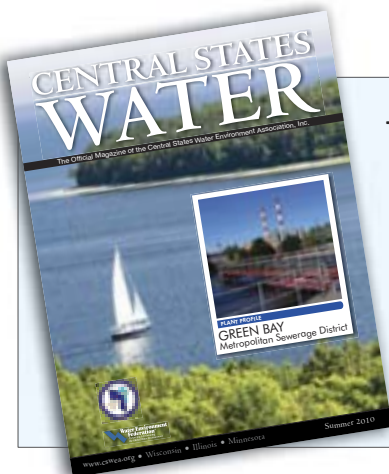
CSWEA Associate Membership Benefits include: Central States Water Magazine and Member price for CSWEA and Section Events	Dues cover a one year period, and must be renewed annually.	DUES
* I am a Young Professional (35 yrs or younger, less than 10 work experience) <input type="checkbox"/> Please send me info on YP Events	Renewal notices will be sent one month prior to anniversary date.	\$ 20.00

Payment Information

* Check/Money Order enclosed. Make check payable to Central States Water Environment Association.
OR Visit www.CSWEA.org to join on-line and pay by credit card. Visa, Master Card & American Express Accepted.

Mailing Information

Send Form & Payment to: Central States Water Environment Association, 3809 Shenandoah Drive, Crystal Lake, IL 60012 Call 815-954-2714 for additional information or visit www.CSWEA.org



To reach water industry professionals in Minnesota, Illinois and Wisconsin through **Central States Water** magazine and its targeted readership, please contact me at

1-866-985-9782
awhalen@kelman.ca



Al Whalen
Sales Manager

Join CSWEA & WEF Now! Membership Application

Last Name		MI	First Name		(Jr., Sr., etc.)
Business Name (if applicable) <input type="checkbox"/> Business Address <input type="checkbox"/> Home Address					
Street or PO Box					
City		State		Zip	Country
Home Phone Number		Business Phone Number		FAX Number	
E-mail Address					
<input type="checkbox"/> Please send me information on special offers, discounts, training, and educational events, and new product information to enhance my career. <input type="checkbox"/> by email / <input type="checkbox"/> by fax Member Association (MA) Choice: Central States Water Environment Association					
Employment Information					
Employer Code		Other (please specify)		Job Title Code	
Environmental Focus		Other (please specify)			
Signature (required for all new memberships)					Date
Sponsorship Information					
WEF Sponsor Name & Sponsor ID Number:				ACQ.Code for WEF use Only GENI	
Membership Information					
Membership Categories <i>Select one only</i>		Member Benefit Subscription <i>Select one only</i>			DUES
<input type="checkbox"/> ACTIVE					\$ 102.00
Individuals involved in or interested in water quality. Young Professional		<input type="checkbox"/> WE&T (including Operations Forum) <input type="checkbox"/> WEF Highlights Online <input type="checkbox"/> Central States Water Magazine YP=<35 yrs of age, < 10 yrs work experience can receive 50% discount for 1 st three years of membership			\$ 51.00
<input type="checkbox"/> OPERATIONS					\$ 64.00
Individuals involved in the day-to-day operation of wastewater collection, treatment or laboratory facility, or for facilities with a daily flow of < 1 mgd or 40 L/sec.		<input type="checkbox"/> WE&T (including Operations Forum) <input type="checkbox"/> Water Environment Laboratory Solutions <input type="checkbox"/> WEF Highlights Online <input type="checkbox"/> Central States Water Magazine			
<input type="checkbox"/> STUDENT					\$ 30.00
Students enroll for a minimum of six credit hours in an accredited college or university. Must provide written documentation on school letterhead verifying status, signed by an advisor or faculty member.		<input type="checkbox"/> WE&T (including Operations Forum) <input type="checkbox"/> WEF Highlights Online <input type="checkbox"/> Central States Water Magazine			
<input checked="" type="checkbox"/> CORPORATE					\$ 270.00
One person is entitled to receive member benefits. Companies engaged in the design, construction, operation or management of water quality systems. Designate one membership contact.		<input type="checkbox"/> WE&T (including Operations Forum) <input type="checkbox"/> Water Environment Research (Print) <input type="checkbox"/> Water Environment Regulation Watch <input type="checkbox"/> WEF Highlights Online <input type="checkbox"/> Central States Water Magazine			
Dual Member Association Memberships Please indicate additional WEF MA(s) you would like to join and include the MA's Dual Membership dues. WEF can track up to three additional associations.		MA 1 MA 2 MA 3			\$ \$ \$
Additional Subscriptions					
Consider including additional WEF resources in your membership package! Check the appropriate subscription and include the subscription cost in your payment. NOTE: Prices listed reflect a substantial member discount!		<input type="checkbox"/> WE&T (including Operations Forum)		\$55.00	\$
		<input type="checkbox"/> Water Environment Research (Online) (Call for print pricing details)		\$75.00	\$
		<input type="checkbox"/> Water Environment Laboratory Solutions		\$50.00	\$
		<input type="checkbox"/> Water Environment Regulation Watch		\$50.00	\$
		<input type="checkbox"/> Industrial Wastewater Technical Bulletin		\$89.00	\$
		<input type="checkbox"/> Biosolids Technical Bulletin		\$89.00	\$
		<input type="checkbox"/> Watershed & Wet Weather Technical Bulletin		\$89.00	\$
		<input type="checkbox"/> Utility Executive		\$89.00	\$
Payment					
<input type="checkbox"/> Check/Money Order enclosed		<input type="checkbox"/> Charge		Credit Card Number	
(Made payable to WEF in US funds)		<input type="checkbox"/> VISA		Exp. Date	
		<input type="checkbox"/> American Express		Signature	
		<input type="checkbox"/> MasterCard		Daytime Phone	
				TOTAL DUE	\$
Mailing Information					
Send Form & Payment to: Water Environment Federation • Member Service Center • PO Box 18044, Merrifield, VA 22118-0045 For more information, call 1-800-666-0206 (U.S. and Canada) or + 1-703-684-2452 (all other countries) • Fax + 1-703-684-2428 • www.wef.org					

SANITAIRE

Total Process Treatment Solutions

SANITAIRE® and **ABJ** are the world leaders and industry standard in wastewater treatment plants throughout the world with equipment operating in thousands of facilities. Years of dedicated and knowledgeable engineering have led to the development of our various process treatment solutions. They include in part.....



- **Fine Bubble Aeration Equipment**

- High oxygen transfer capabilities and low operating costs
- Proven piping and support system for long-term reliability
- Ceramic disc and membrane disc configurations available
- Minimal maintenance requirements

- **Sequencing Batch Reactors (SBRs)**

- Continuous flow operation yields smaller basin volumes, equal loading between basins and allows for single basin operation
- Enhanced biological nutrient removal with the use of pre-react selector zone
- Low cost operations with high-efficiency SANITAIRE® fine bubble diffusers
- Easily expandable to account for increasing future plant flows



- **MIZAIR® Oxidation Ditch**

- Excellent effluent quality including biological nutrient removal
- No submerged mechanical aerator devices.
- Lower maintenance costs than comparable technologies
- Low cost operations with high-efficiency SANITAIRE® fine bubble diffusers

- **DrumFilters**

- Low energy consumption - power only required during backwash cycle
- Wide range of capacity: 100 - 2,500 gpm per unit
- All corrosion resistant components for long term reliability
- Minimal maintenance requirements



Sanitaire
9333 N. 49th Street
Brown Deer, WI 53223
Tel: 414.365.2200
Fax: 414.365.2210
Email info@sanitaire.itt.com

Sanitaire



ITT

Engineered for life

WASTEWATER
TREATMENT

BIOLOGICAL
TREATMENT

TRAINING
SERVICES

COMPLETE
SOLUTIONS

GUARANTEED
FIELD PERFORMANCE



DONOHUE

WASTEWATER ENGINEERS & TROUBLESHOOTERS



www.donohue-associates.com
1-888-736-6648

Champaign, IL • Chicago, IL • Rock Island, IL • St. Louis Park, MN • Willmar, MN
Madison, WI • Milwaukee, WI • Sheboygan, WI • Fort Wayne, IN • Indianapolis, IN • Chesterfield, MO

CREATIVE AWARD-WINNING SOLUTIONS