Two Rivers Wastewater Treatment Plant

37th Annual W.W.O.A. Conference
October 21-24, 2003
Wisconsin Dells and Kalahari Resort Headquarters

HOST: Wisconsin Dells/Lake Delton
Wastewater Treatment Plant
President's Message

Hello Fellow Water Professionals.

I am glad that we now have the luxury of spell check on computers because without it this column would probably be a mess. My fingers are frozen from being outside all day shoveling snow and doing other things that we operators must do so I am having trouble typing. Oh well, that’s winter in the Midwest isn’t it! So here we go! In mid-December, Richard McKee and I were invited to Madison by then DNR Secretary Darrell Bazzell to receive an award on behalf of the WWOA. The award was called Wisconsin Clean Water Achievement Award. It was for our organizations continued and past efforts to maintain clean water in our streams throughout Wisconsin. What a proud moment it was for me to represent our members to receive this award! Regional Coordinator Kay Marshall will be taking the award with her on her travels to district meetings this year to display on the WWOA Board. Be Proud!

In my very first column I hounded the District Officers about posting items such as future meeting dates, agendas, pictures etc., on the website. I am glad to say that many of the Districts are making a concerted effort to post timely information for web readers. I commend you for these efforts and hope that we now have something to continue to build on.

By the time you receive your February issue of the Clarifier, the Technical Program Committee will have met at the Kalahari in Wisconsin Dells to begin the formation of the Technical Program for the 37th annual conference of the WWOA. It promises to be one of the best, if not the best, conference ever! Technical Chairman Tim Nennig tells me he has about 60 submittals to choose from so we will have a tough time deciding what to use in the program and what not to use.

During the last Board of Directors meeting I appointed Kay Marshall to form and head an ad hoc committee to investigate ways to promote the wastewater industry in high schools. I feel that we need to do this so we can replenish the list of possible replacements for many of us who will be retiring in the next couple years or so. Kay is very excited about this and has been very busy so far and it looks like we are going to accomplish this one way or another.

In closing I will make the usual reminders. Believe it or not, now is the time to begin forming your operator competition teams. Last year we had four out of six regions compete. This year let’s make it six out of six.

This year there will be three Board of Director positions up for grabs. If you are contemplating running for a position this year, contact Judy Tholen to get your name into nomination. Pete Conine tells me he is waiting for applications to pour in for the Tuition Aids and Scholarships. If you need an application, get a hold of Pete or go online at www.wwoa.org and print one off for yourself. Make sure that you nominate a deserving person for an award this year. Contact your regional officers for your "Operator of the Year." For the "Bernauer, Crabtree and Service Awards" contact Randy Herwig.

Keep your eyes peeled for WWOA sponsored training this year. Tom Kruzick and Jim Thalke will work well together to provide us with some new ideas for training this year. The first round of regional meetings will be starting soon so support your districts. Check online to see what other districts have to offer. Maybe they would be providing some training that you have been looking for.

Thanks and see you soon and Go Pack! Oh I guess next year anyway!

Dickeyville Dale
Two Rivers Wastewater Treatment Plant
By Larry Lambries, City of Two Rivers, Water and Wastewater Superintendent & Larry Krause, PE, Donohue & Associates, Inc.

The City of Two Rivers wastewater treatment plant serves over 13,400 residents and 350 commercial and industrial businesses. It is designed to treat up to 3.0 million gallons per day (mgd) average flow and a 7.0 mgd peak flow. Plant processes include fine screening, raw wastewater pumping, primary clarification, aeration, secondary clarification, and disinfection. Primary and waste activated sludges are stabilized in an anaerobic digester and dewatered with a belt filter press. The plant is located close to downtown businesses and Lake Michigan and has limited space available for expansion.

The wastewater treatment plant has undergone many changes over the years. One recent change involved the installation of an ultraviolet (UV) disinfection system to replace the gas chlorination system. The former chlorine contact tanks were then converted to aeration basins. Both phases of the project included the re-use of existing facilities, thus saving significant construction cost and valuable green space at the plant.

UV Disinfection
Prior to this project, the City used a gas chlorination system to disinfect its wastewater. The City wanted to switch from this process to a UV disinfection system for several reasons, including the following:

- The City could eliminate the storage and use of chlorine gas and liquid sodium bisulfite. Chlorine posed safety concerns and would have required additional measures to meet U.S. Environmental Protection Agency (EPA) regulations. It would also have required construction of expensive "scrubber" facilities and development of a chlorine-specific safety monitoring and management plan.
- When chlorine is used for disinfection, byproducts in the form of chlorinated hydrocarbons are often formed and discharged in the effluent. These hydrocarbons may be carcinogenic, and are likely to be resistant to breakdown by natural mechanisms. UV disinfection does not form these byproducts.

Because the City must disinfect year round, an indoor UV facility was desired; however, available space at the plant site was severely limited. The UV facilities were designed to fit into the existing chlorine storage room. This allowed indoor UV facilities to be installed without constructing a new building, and gave new life for a space that would have otherwise gone unused.

The UV system includes several state-of-the-art components to address operation and maintenance issues. The plant uses ferric chloride to remove phosphorus compounds in the primary clarification process. Ferric chloride has the potential to affect the UV process by coating the UV lamp sleeves with iron.
The UV system incorporates new automated on-line chemical cleaning of the UV lamp sleeves. It is one of the first plants in the U.S. to feature this technology.

compounds, thereby reducing UV efficiency. The only way to combat this problem is to frequently clean the lamps. The UV system has an automated, on-line chemical cleaning system for the UV lamp sleeves. The system also utilizes low pressure, high intensity UV lamps, resulting in fewer installed lamps than conventional UV systems. It is one of the first wastewater plants in the nation to feature these two technologies.

Aeration Basin Conversion

Prior to the improvements, the aeration process had limited capacity. The plant was organically overloaded and was operating above its rated capacity. The City must nitrify, and meeting permit requirements consistently during winter and spring months was difficult.

Adding aeration capacity by constructing new aeration basins was possible, but would take up most of the available plant site. Fortunately, the Two Rivers plant configuration is unique in that the chlorine contact tanks are directly adjacent to the aeration tanks. The City was able to convert the newly-abandoned chlorine contact tanks (which served as primary and secondary clarifiers in a previous "life") to aeration basins. This provided much needed aeration capacity without constructing new tankage.

The plant also had a hydraulic limitation in the secondary process. When it was necessary to take out an aeration basin or final clarifier for maintenance, half of the aeration system and one final clarifier had to be removed from service. Treatment efficiency was always affected during maintenance periods. Routine maintenance had to be planned around the weather due to hydraulic restrictions placed on the plant.

As part of the aeration upgrade, piping changes were implemented that allow a single clarifier or aeration basin to be removed from service while the rest remain in operation. This was accomplished utilizing almost all of the plant’s existing piping.

Summary

Both phases of this project have been very successful. The UV disinfection system frequently achieves a 100 percent bacteria kill rate, which was seldom achieved with the chlorine system. By reconfiguring the unneeded chlorine contact tanks to aeration basins, the plant was able to increase aeration capacity by 60 percent without constructing new facilities.

As a result of this project, the City of Two Rivers and the project’s engineer, Donohue & Associates, Inc., received an Engineering Excellence Honor Award from ACEC of Wisconsin.

Wastewater Treatment
Collection Systems
Sludge Management
Industrial Flow Monitoring

Engineering, Surveying, and Environmental Services

4664 Golden Pond Park Court
Oneida, WI 54155
(STH ’29’ @ CTH ‘FF’)
Phone: 920-662-9641
Fax: 920-662-9141
800-986-6338

Visit our Website:  www.releeinc.com
E-mail us:  rel@releeinc.com
A new catalog just for water and wastewater labs!

NEW! LAB CATALOG

To request our new 185-page Lab Catalog*, call 1-800-548-1234 or visit us at www.usabluebook.com

*All items in our Lab Catalog can also be found in our new #113 general catalog!
Internet access and the ability to communicate via electronic mail are two items that today’s WWTP operator has added to their "tool box" of work skills. The Internet is an information rich source that makes accessing vendor sites and communicating with fellow professional operators fast and effective.

As members of the WWOA, we all have the privilege of belonging to an organization that prides itself on a fantastic web site of our very own. The WWOA web site is maintained by and for the WWOA membership. We not only welcome comments and suggestions, we rely on input from you in order to improve the site.

So what are some ongoing activities worth mentioning? We have added Committee Chair assignments as well as Board member information and photos to the Directors Information section. We are continuously updating the Employment Opportunities section as new positions become available. Check out the Training Events & WWEA Calendar for the latest information available on water/wastewater training opportunities across the state.

Wondering where you can pick-up some of that great WWOA apparel and other promotional items? Look no farther than the Promotional Items section where you order your items online and have them delivered right to your front door! Under the Clarifier section we have added downloadable sign-up forms for vendors and consultants wishing to advertise in the Clarifier.

The classic Tips and Ideas section remains a favorite of the membership when searching for those great operator tricks of the trade. Our Members Only section allows protected access to the searchable plant database containing valuable information on over 600 WWTPs across the state. In addition, this same section contains Bob’s Bug Page and the subscription procedures to get on the WWOA Mail List.

We are planning once again to develop an Annual Conference section that will become your web-based "one stop shop" for conference related information and forms. This section should appear sometime in late February or early March. Wisconsin Dells and the Kalahari Resort - here we come!

The WWOA Mail List continues to grow in sign-up and volume of email exchange on a daily basis. Subscribers are realizing the many benefits of "being in the loop" with this truly interactive exchange service. This service is free to all members and a direct benefit of membership.

Our Searchable Vendor Database remains strong at 68 individual firms providing excellent wastewater related products and services. Don’t know where to start looking for a specific need at the plant? This searchable database should be your first place to start! Please support the vendors using this database! Not only will you find contact information but most vendors offer quick links directly to their very own web sites!

Trying to get a handle on upcoming Regional activities across the state? Check out the Regional Information section for the latest available information. Regional officer contact information can be located here in addition to regional meeting announcements, meeting photos and minutes, award recipients and more. The Web Site Committee is planning several enhancements to the site content in 2003.

Looking for membership applications or perhaps scholarship and tuition aid criteria/forms? Check out the Members Benefits section. Here you will find many of the downloadable forms section. Here you will find many of the downloadable forms section.
Changes for the Upcoming Year

Web Master Thompson continues the early planning stages of a complete web site overhaul. This overhaul will provide online visitors with better navigation, more graphics, etc. Every section within the web site will be evaluated based upon value and membership viewing statistics and changes made accordingly.

The Committee is currently evaluating possible changes to the Mail List discussion forum set-up. We are considering new and improved ways to archive the many Mail List discussions that occur and to make searching those archived messages more user friendly. Subscribers have been asking for improved ways to access previous discussions; this is our attempt at accomplishing that request.

A regulatory information section has been on the "drawing board" for several months now. Although not yet officially posted, this new section will contain direct links to important and timely regulatory information/updates from sources at the EPA, WI DNR and other web sites. We would also like to make available online many of the WI DNR reporting forms relative to the wastewater area.

The Committee remains very much interested in archiving the legendary Clarifier issues as they become available.

Our idea is to create an online library of archived Clarifier issues as far back as we can go.

Lastly, I would like to acknowledge fellow Committee members who spend countless hours improving the web site. Web Master Scott Thompson continues to perform the majority of our web site work; he is a great asset to have on board. Committee members include: Dan Busch (Green Bay), Rich Boden (Plover) and Gary Zimmerman (Beloit).

Timothy A. Nennig
WWOA Web Site Committee Chair

<table>
<thead>
<tr>
<th>CLARIFIER DUE DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>APRIL 2003</td>
</tr>
<tr>
<td>JUNE 2003</td>
</tr>
<tr>
<td>SEPTEMBER 2003</td>
</tr>
<tr>
<td>DECEMBER 2003</td>
</tr>
</tbody>
</table>

The Other Guy - Compare and SAVE
Chemical Feed Equipment CL2 & SO2 Feeders

Gas Chlorinators: Ecometrics-Hydro Instruments-Regal-Superior & W&T Service---Repairs---Parts-- Large inventory of equipment and parts
Specializing in replacement parts for Advance ™ / Capitol Controls

Chlorine Gas Accessories
Chlorine and drum scales -- Force Flow, Sacletron, Howe, Detecto -- Booster pumps
vacuum lines, fittings and main probes -- Fiberglass storage enclosures -- CL2 & SO2 gas alarms
Quality Products ---Timely Delivery ---Fair Prices
Chemical Feed Pumps LMI—Pulsafeeder---Stenner--Standard
Bulk storage tanks 5-5000 gallon, PVC fittings, hose, pump shelves

The guy who can answer those hard questions: The what, when, where, how & why to feed chemicals.

John Szymanski -- I am the guy you have been looking for. Give me a call.
Over 27 years of working in water

Give John a call - he repairs them all! You will be glad you did.
1-800-253-7235
Alden Pool & Municipal Supply Co.
The Big Chair is Waitin'
By J.K. Wilson

Now we all have our sights on pretty good career
Like singin’ old tunes and scrubbin’ the weirs.
But there’s a higher place for those who stay
And work with those bugs from day to day.

Chorus:
No breaks today the sun is on your back
Salty old sweat runnin’ down the butt crack.
Invest your mind in some wastewater time
Cause the big chair is waitin’ for the right behind.

It’s a long way to for success you see
Like Professor Koby T. Crabtree.
He always had saying that "You don’t want to know"
Where he found that bug and how it came to grow.

Chorus:
Eikelboom, Jenkins, and Diager got it right
With wastewater as their guiding light.
They figured it all out and recorded it in ink
Now wastewater plants produce a pretty good drink.

Chorus:
So if you think that what you’ve done is all that you
can do
Take another look at water issues.
We drink it then we bathe and flush it down the tubes
The time for reclamation is way past due.

Chorus:

For Sale WWOA Equipment
Wide carriage DOT Matrix Printer, Like new,
Panasonic 3000 LE Series, 24 Pin, Kx-P3626;
Would work very well for a scada report
printer: Scanner- Model No. SF-600C, Image
Reader ISA, with software and drivers.
Sealed bids can be sent to:
Richard D. McKee
416 Herman Street
Arena WI 53503

"Operator input was an important part of the treatment
plant upgrade process. MSA's engineers listened and responded
to us throughout the project."—Jeff Moore (left) and Jeremy
Cramer, current and former wastewater treatment plant operators,
respectively, City of Adams, WI

MSA helped the City of Adams obtain a
favorable grant/loan package to fund a
WWTP upgrade, and incorporated
innovative design features to reduce
costs. For example, the control system
used feedback from D.O. probes to
determine aerator speed, reducing the
plant's monthly electrical consumption.
When innovation and cost-saving design
can help your community, turn to
MSA—your trusted partner!

Above: the dissolved oxygen probe at work.
PETE RSON & MATZ EXPANDS
USFILTER REPRESENTATION

Effective Jan. 1, 2003, Peterson & Matz, Inc. will be the sales representative for some of USFilter’s water and wastewater treatment equipment in the State of Wisconsin and for Michigan’s Upper Peninsula. The manufacturing representative firm, specializing in municipal and industrial water and wastewater treatment, already represents various USFilter product lines in Illinois and parts of Michigan.

Peterson & Matz is opening a new office in Wausau, Wis., which will be headed by former USFilter employee and area native, Rob Szekeress. The firm’s Wausau branch will sell USFilter’s Asdor, CPC, Davco, Dewatering Systems, Envirex, Kruger and Zimpro product lines.

PROFESSIONAL OPERATORS 2003
MOTORCYCLE RIDE
ANNOUNCEMENT

The 2003 professional Operators Ride is scheduled for July 24-26.

Dave and Sally Goetsch from Eau Claire are hosting the Ride.

The host hotel is Park Inn International in Eau Claire. The contact number at the hotel is 715-838-9989.

For those planning to attend the Operators CookOut on Thursday the 24th, please RSVP to Dave and Sally at 715-838-3962.

The Ride is open to WWTP Operators, Staff and their guests.
Government Affairs Seminar Agenda
Marriott Hotel, Middleton WI - February 27, 2003

8:00 Registration
8:25 Welcome/Opening Remarks - Randy Herwig
8:30 Moderator - Bernie Robertson
  Keynote
  Ron Kind, U.S. Representative - Invited
  Biosolids - Regulatory Issues and More!
  Dave Taylor
9:45 Break
10:00 Moderator - Paul Kent
  Sanitary Sewer Overflows (SSO's)/Capacity, Management, Operation and Maintenance "CMOM" Overview - Duane Schuettpelz
  Compliance Maintenance Annual Report (CMAR) Program Revisions - Jack Saltes
  Funding - Grants, Loans, Utility Districts
  Paul Kent
12:00 Lunch
1:00 Moderator - Amy Tutwiler
  Analysis & Reporting - NR148, NR149,
  Electronic Reporting/Database - David Webb
  Water Quality Standards Update - Ammonia, Bacteria, Nutrients, Thermal,
  Water Body Use Designations - Bob Masnado
2:15 Break
2:30 Moderator - John (Sewerman) Leonhard
  Storm Water (NR 216) Municipal and Construction Permitting and Phase II Implementation - Mary Anne Lowndes
  Pollution Prevention for Persistent Bio-Accumulating Toxins (PCBs, Mercury, etc.) Update - Jack Annis
3:45 Seminar Adjourns

Since 1959 we’ve represented the most respected manufacturers of water and wastewater equipment. We understand your needs and fill them quickly, economically and dependably.

ALL TO MAKE YOUR JOB EASIER.

CALL US. WE REPRESENT THE BEST IN THE INDUSTRY!
Serving Minnesota, North Dakota, South Dakota and Northwestern Wisconsin.

DAVCO INC.
2334 Lexington Avenue North • Roseville, MN 55113 • 651/483-6663 • Fax: 651/483-0703
helping your community grow.

Mead & Hunt engineers are designing 14,500 lineal feet of interceptor extending into the Sauk City and Prairie du Sac growing communities. For more than 20 years, Mead & Hunt has helped the Sauk Prairie Sewage Commission meet their increasing needs.

Trust all your infrastructure needs to us.

Mead & Hunt
ENGINEERS
ARCHITECTS
SCIENTISTS
PLANNERS

Madison  Green Bay  La Crosse  Milwaukee
1-888-ENGR-ARC  www.meadhunt.com
The meeting was called to order by President Tholen at 1:10 PM October 7, 2002. All Board members were present except Pete Conine who arrived later. Also present was Tom Davy, chair of the golf outing.

The minutes of the August 14, 2002 Board meeting were reviewed. President Tholen noted a typo that needed to be corrected in the minutes. Neis made a motion to approve the minutes with the correction. DeJarlais seconded the motion. Motion carried.

McKee presented the Financial Statement for Board approval. McKee stated as of August 31, 2002 we have $138,191.48 in revenues and $130,292.51 in expenditures, with excess revenues over expenditures totaling $7,898.51. A brief discussion pursued.

After a few corrections were noted, Herwig made a motion to approve the Financial Statement with the needed corrections. Kruzick seconded the motion. Motion carried.

McKee presented the vouchers 224 - 235 and 1 - 15 for Board approval. Herwig made a motion to approve the vouchers as presented. Neis seconded the motion. Motion carried.

COMMITTEE REPORTS

NOMINATIONS - Boden informed the Board that Randy Herwig has been nominated for the position of President-Elect and Tim Nennig has been nominated for the position of Vice-President. Boden has received three nominations for Directors, John Bond, Troy Larson and Jeremy Cramer.

PROMOTIONAL ITEMS - DeJarlais provided the Board with an inventory for the Wastewater Warrior merchandise from 2001 and merchandise prior to 2001. He also updated the inventory on the website.

MEMBERSHIP - Conine stated we have 1925 members; this includes active members, lifetime members and retired members.

SCHOLARSHIP - Nennig reported the Scholarship Committee has received a total of two applications for the upcoming 2002/2003 academic school year. Both of this year’s applicants have applied for the 4-year $1000.00 annual scholarship provided by the organization. This year the Committee has not received any applications for the annual 2-year $500.00 scholarship offering. Our two applicants are Jessica Doll and Aaron Tice. After a brief discussion, Herwig made a motion to approve the two applicants for the Scholarship Awards. Kruzick seconded the motion. Motion carried. Nennig commented he has received one application for tuition Aid. Richard Heinritz from Rib Mountain MSD has applied for reimbursement payable during the fall of 2002.

EXECUTIVE COMMITTEE - No report.

CLARIFIER - The Board discussed the idea of obtaining price quotes from other publishing firms to do the complete job of publishing the CLARIFIER.

AWARDS - Neis informed the board that on the Bernauer award plaque listing past winners that George Bowman’s name was spelled wrong so he had a corrected nameplate made.

OPERATOR TRAINING - Kruzick stated the Operator Training Committee had a very successful year in providing regional training opportunities for our members. Kruzick thanked the Wisconsin Department of Natural Resources and Manufacturing Representatives for their support in our efforts, and providing experienced speakers.

DIRECTORY - McKee commented that we would begin editing the directory in the next few weeks. The new directories will be available in May or June of 2003.

PUBLICITY - Marshall provided the Board with copies of the press release that was prepared for the 2002 Annual Conference. It was sent to local television, newspapers and radio stations in the La Crosse area. A press release, agenda, and other conference information was also sent to the University of La Crosse Department of Microbiology for distribution throughout the UW departments to students who may have an interest in attending the conference.

REGIONAL COORDINATOR - Marshall complimented all of the regional officers on the excellent jobs that they have done throughout the year. She attended
regional meetings in all of the regions except the Southeast and was impressed with all of the work that has been done in each region.

Marshall distributed copies of the regional newsletter that was sent to all officers on September 11, 2002. The annual Regional Officer’s meeting will be held on October 8, 2002 at 4:00 PM in Boardroom B of the La Crosse Center. The Board directed Marshall to inform the Regional Officers to make sure all board members are on the mailing lists for regional meetings.

GOVERNMENT AFFAIRS - Herwig stated the Committee would be meeting at Strand Associates in Madison. The Government Affairs Seminar is scheduled for February 27, 2003.

LIAISON - Kruzick commented the next meeting for CSWEA is scheduled for November 13, 2002 in Milwaukee.

WEB SITE - Nennig reported that in excess of 250 web site changes of varying degrees were initiated during this past year. Since November of 2001, the web site has received almost 49,000 page views and has had close to 5,700 visitors.

The mail list continues to serve as an outstanding supplement to our CLARIFIER publication by providing timely employment opportunities, regulatory updates, and conference updates.

The searchable plant database section is currently the fourth most viewed page at wwoa.org. A user-friendly Plant Info Update form has been posted on the user Search Page so that members can easily update their own plant information.

Nennig stated the WWOA regions need to improve upon their use of the web page space available to them. The regional information section at wwoa.org is currently the third most viewed section out of all the site sections.

Nennig informed the Board on some of the Web Site Committee Activities planned for 2002/2003. Expand Directors Information Section to include individual photos of Board members. Examine current web site contents, evaluate section viewing with current Sawmill traffic counts, and initiate a web site overhaul. Develop a brand new section dedicated solely to current regulatory issues including WDNR and US EPA updates. Restructure the Current Web Site Committee make-up by
reaffirming intentions of existing Committee members and adding some new individuals to keep the site materials fresh. Investigate the potential for creation of an expanded "centralized training opportunities section" that would include not only dates and times but meeting agendas, flyers, etc. Continue investigating electronic archiving of CLARIFIER issues.

TECHNICAL PROGRAM - Herwig stated the abstract material was received and returned to Becher-Hoppe. The only changes were the speaker names and time slots. Evaluation sheets have been received. Moderators are now all set. There have been a few changes since the abstracts went to print. Currently there are five entries for the tricks of the trade contest. Still need to arrange judges for this event.

EXHIBIT COMMITTEE - McKee reported for Carol Strackbein. They have sold a total of 107 booths. Strackbein provided the Board with a list of the exhibitors along with their assigned exhibit space. The booths were assigned based on the date the request for booth space was received. There will be refreshments in the booth area at 4:00 PM on Wednesday.

OPERATOR COMPETITION - Neis commented the competition should be good with 5 of the 6 regions fielding a team in the competition. The Judges this year are as follows: Mechanical Event: Kevin Skogman and Greg Alden; Safety Event: Paul Lange, Jeff Braatz and Dave Sasada; Process Problem: Wally Thom; Lab Event: Dan Tomaro and Monty Baker.

LOCAL ARRANGEMENTS - DeJarlais stated the busing arrangements have been finalized and contracts have been signed. The golf outing will feature an 18-hole scramble format with a shotgun start. Tom Davy from Davy Engineering and Ramon Knudtson from Melrose are handling the arrangements. Tours have been arranged and all buses will depart from the La Crosse Center South Hall entrance.

SPouse PROGRAM - DeJarlais stated the spouse program is mostly complete. The spouses' hospitality room is in the South Hall of the La Crosse Center. The room will have information about La Crosse available, and will be staffed as necessary.

PERMANENT ARRANGEMENTS - McKee asked for approval to sign the contract with the Kalahari for 2006. After a brief discussion, Herwig made a motion to approve and sign the contract with the Kalahari for 2006. Marshall seconded the motion. Motion carried.

PERMANENT PROGRAM - No report.

RESOLUTIONS AND BYLAWS - No report.
BRAUN PUMP & CONTROLS
1-800-211-6432
FOR WATER AND WASTE WATER EQUIPMENT.
FAST AND EFFICIENT FACTORY TRAINED STAFF,
EXPERIENCED IN ALL ASPECTS OF WATER AND
WASTEWATER TREATMENT FIELD.

“A Proven Commitment to Quality Service”

FIELD SERVICE / IN SHOP REPAIR

- PUMP REPAIRS - ALL MAKES
- CONTROL REHABILITATION
- LIFT STATION REHABILITATION
- CHECK VALVE REPLACEMENT
- CONTROL TROUBLE SHOOTING
  • CONSULTING
  • EQUIPPED FOR CONFINED SPACE ENTRY
  • EMERGENCY BYPASSING SYSTEMS

AUTHORISED SALES & SERVICE FOR

PUMPEX
WASTECORP. Inc.

ALLWEILER

PS Precision Systems

We Use Only Original Equipment Manufactured Parts

1574 3rd Ave. SW, Suite 2, NEW PRAGUE, MN 56071
952-758-6600 • FAX 952-758-7778
218-566-4994 (Northern Minn. Shop) • 715-656-4481 (Wisc. Shop)
e-mail braunpmp@bevcomm.net
HISTORICAL - McKee reported he received all the information from Ken Sedmak. Everything is done and ready to go on the Historical Board.

MANUFACTURERS AND CONSULTANTS - No report.

Herwig made a motion to accept the committee reports as presented. Kruzick seconded the motion. Motion carried.

OLD BUSINESS

Conine informed the board he has been working on establishing a new policy regarding sponsorship of WWOA Seminars. After a discussion, the Board directed Conine to expand on the wording and the policy will be discussed at a future Board meeting.

NEW BUSINESS

REVIEW AND APPROVAL OF THE ANNUAL BUSINESS MEETING AGENDA - McKee provided the Board with copies of the agenda of the Annual Business meeting for their review. After a brief discussion and a few changes, Herwig made a motion to approve the Annual Business Meeting Agenda with the changes. Boden seconded the motion. Motion carried.

OTHERS - McKee provided the Board with copies of the 2001-2002 audit for review. After a brief discussion, Herwig made a motion to approve the audit report as presented. Marshall seconded the motion. Motion carried.

Conine distributed copies of the Municipal Environmental Group minutes and Regulatory Update.

Boden thanked all the Board members and stated it has been a privilege to serve on the Board.

DeJarlais commented it has been an honor serving on the Board and how much respect and admiration he has for this Board.

There being no further business Boden made a motion to adjourn. DeJarlais seconded the motion. Motion carried.

The Board meeting adjourned at 8:40 AM on Tuesday, October 8, 2002.

Respectfully submitted,

Richard D. McKee
Executive Secretary
OPERATOR COMPETITION

1st Place - West Central
Don Krohn, Scott Thomas,
Dwight Moseley, Kay Marshall

2nd Place - North Central
Jeremy Cramer, Rich Heinritz,
Andy Heise, John Grall

Lake Michigan
Eric Storm, Jeff Smudde,
Mike Gelhar, Dan VandenAvond

Southeast
Dan Waala, Jim Bergles
Dale Hapner, Randy Kerkman

Judges
(Back) Greg Alden, Monty Baker, Paul Lange, Wally Thom
(Front) Kevin Skogman, Danny Tomaro, Jeff Bratz, Dave Sasada
2002 WWOA AWARDS

KOBY CRABTREE AWARD
Mike Humcke (L) Environmental Resources
Presented by Ken Sedmak

BERNAUER AWARD
Don Ceplina (L) Stevens Point
Presented by Rich Boden

WWOA MEMBERSHIP AWARD
Kay Marshall
SEH - Rice Lake

2003 WWOA BOARD of DIRECTORS
(L to R) Jim Thalke, John Bond, Tom Kruzick, Pete Conine, Judy Tholen,
Kay Marshall, Tim Nenning, Dale Neis, Randy Herwig
2002 REGIONAL OPERATOR AWARDS

Lake Michigan Region
Louis Dresen, New London (R)
Presented by Carol Radtke

Northwest Region
Michael Dunn, Stetsonville (L)
Presented by Craig Nordgren

North Central Region
Jerry Brehm, Vesper (R)

West Central Region
Larry Marcks, Pepin (R)
Presented by Wade Peterson

South East Region
Dennis Harmer, Kenosha (L)
Presented by Don Driver

Southern Region
Wally Luttenberger, Waupun (L)
Presented by Ari Mathos
<table>
<thead>
<tr>
<th>Exhibitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAPTOR INC.</td>
</tr>
<tr>
<td>ADVANCED SAFETY TECH INC.</td>
</tr>
<tr>
<td>AG-CHEM EQUIPMENT CO.</td>
</tr>
<tr>
<td>AIRVAC</td>
</tr>
<tr>
<td>ALLAN ENGINEERING CO., INC.</td>
</tr>
<tr>
<td>APPLIED TECHNOLOGIES INC.</td>
</tr>
<tr>
<td>ASC PUMPING EQUIPMENT</td>
</tr>
<tr>
<td>ASPEN RESOURCES</td>
</tr>
<tr>
<td>AYRES ASSOCIATES</td>
</tr>
<tr>
<td>BAXTER &amp; WOODMAN</td>
</tr>
<tr>
<td>BONSESTROO ASSOCIATES</td>
</tr>
<tr>
<td>BRABAZON PUMP</td>
</tr>
<tr>
<td>BRAUN PUMP &amp; CONTROLS INC.</td>
</tr>
<tr>
<td>CARDINAL ENVIRONMENTAL</td>
</tr>
<tr>
<td>CLARK DIETZ INC.</td>
</tr>
<tr>
<td>COMMERCIAL TESTING LAB</td>
</tr>
<tr>
<td>CORROSION CONTROL RESOURCES</td>
</tr>
<tr>
<td>CPR SERVICES INC.</td>
</tr>
<tr>
<td>CRANE ENGINEERING SALES</td>
</tr>
<tr>
<td>CRETEX SPECIALTY PRODUCTS</td>
</tr>
<tr>
<td>CRISPELL-SNYDER INC.</td>
</tr>
<tr>
<td>DAVIES WATER EQUIPMENT</td>
</tr>
<tr>
<td>DAVIES/NORTHERN WATER WORKS SUPPLY</td>
</tr>
<tr>
<td>DAVY ENGINEERING CO. &amp; DAVY LAB.</td>
</tr>
<tr>
<td>DORNER CO.</td>
</tr>
<tr>
<td>DRUMMOND AMERICAN CORPORATION</td>
</tr>
<tr>
<td>DRYDON EQUIPMENT INC.</td>
</tr>
<tr>
<td>DYNEX INDUSTRIES</td>
</tr>
<tr>
<td>EAGLEBROOK INC.</td>
</tr>
<tr>
<td>EARTH TECH</td>
</tr>
<tr>
<td>ENERGENECS INC.</td>
</tr>
<tr>
<td>ENGINEERING AMERICA INC.</td>
</tr>
<tr>
<td>ENVIRONMENTAL DYNAMICS</td>
</tr>
<tr>
<td>ENVIRONMENTAL RESOURCES</td>
</tr>
<tr>
<td>FERGUS POWER PUMP INC.</td>
</tr>
<tr>
<td>FOTH &amp; VAN DYKE</td>
</tr>
<tr>
<td>FRANTL INDUSTRIES</td>
</tr>
<tr>
<td>GENERAL REPAIR SERVICE</td>
</tr>
<tr>
<td>GS SYSTEMS</td>
</tr>
<tr>
<td>HAWKINS WATER TREATMENT GROUP</td>
</tr>
<tr>
<td>HELIX LABORATORIES INC.</td>
</tr>
<tr>
<td>HYDROCAL</td>
</tr>
<tr>
<td>ICI DEVOE COATINGS</td>
</tr>
<tr>
<td>INFRATECH</td>
</tr>
<tr>
<td>INSITUFORM TECHNOLOGY</td>
</tr>
<tr>
<td>INSTRUMENT CONTROL SYSTEMS</td>
</tr>
<tr>
<td>INTELLISYS INFORMATION SYSTEMS</td>
</tr>
<tr>
<td>ISCO</td>
</tr>
<tr>
<td>ITT FLYGT</td>
</tr>
<tr>
<td>J.R GRANT &amp; ASSOCIATES</td>
</tr>
<tr>
<td>JF AHERN COMPANY</td>
</tr>
<tr>
<td>KAMP/SYNERGY</td>
</tr>
<tr>
<td>KELLY INDUSTRIAL COATINGS</td>
</tr>
<tr>
<td>KNIGHT INDUSTRIAL DIVISION</td>
</tr>
<tr>
<td>L. W. ALLEN INC.</td>
</tr>
<tr>
<td>LAMETTI &amp; SONS INC.</td>
</tr>
<tr>
<td>LEMNA TECHNOLOGIES</td>
</tr>
<tr>
<td>LESMAN INSTRUMENT COMPANY</td>
</tr>
<tr>
<td>MAC SYSTEMS INC.</td>
</tr>
<tr>
<td>MACQUEEN EQUIPMENT &amp; BRUCE</td>
</tr>
<tr>
<td>MUNICIPAL EQUIPMENT</td>
</tr>
<tr>
<td>MARSHALL-BOND PUMPS</td>
</tr>
<tr>
<td>METTLER TOLEDO</td>
</tr>
<tr>
<td>MEYER PROCOM</td>
</tr>
<tr>
<td>MILWAUKEE RUBBER PRODUCTS</td>
</tr>
<tr>
<td>MIX AIR TECHNOLOGIES INC.</td>
</tr>
<tr>
<td>MSA PROFESSIONAL SERVICES INC.</td>
</tr>
<tr>
<td>MULCAHY/ SHAW WATER</td>
</tr>
<tr>
<td>NASCO</td>
</tr>
<tr>
<td>NCL OF WISCONSIN INC.</td>
</tr>
<tr>
<td>NORTHERN LAKE SERVICE INC.</td>
</tr>
<tr>
<td>NORTHERN SEWER EQUIPMENT COMPANY</td>
</tr>
<tr>
<td>ONDEO DEGREMONT INC.</td>
</tr>
<tr>
<td>PARKSON CORPORATION</td>
</tr>
<tr>
<td>RDM &amp; ASSOCIATES</td>
</tr>
<tr>
<td>RECOVERY SYSTEMS</td>
</tr>
<tr>
<td>ROAD-MAT USA INC.</td>
</tr>
<tr>
<td>ROBERT E LEE &amp; ASSOCIATES INC.</td>
</tr>
<tr>
<td>RUEKERT-MIELKE</td>
</tr>
<tr>
<td>SAFE-FAST INC.</td>
</tr>
<tr>
<td>SANITAIRE</td>
</tr>
<tr>
<td>SEWER EQUIPMENT COMPANY</td>
</tr>
<tr>
<td>OF AMERICA</td>
</tr>
<tr>
<td>SHORT ELLIOT HENDRICKSON</td>
</tr>
<tr>
<td>SPECIALTY ASSOCIATES</td>
</tr>
<tr>
<td>STRAND ASSOCIATES INC.</td>
</tr>
<tr>
<td>STRIKE PRODUCTS</td>
</tr>
<tr>
<td>SYNERGY SALES LLC</td>
</tr>
<tr>
<td>TECHNICAL EQUIPMENT SALES INC.</td>
</tr>
<tr>
<td>TEST AMERICA INC.</td>
</tr>
<tr>
<td>THE NELSON AGENCY</td>
</tr>
<tr>
<td>TMI COATINGS INC.</td>
</tr>
<tr>
<td>US FILTER</td>
</tr>
<tr>
<td>USA BLUEBOOK</td>
</tr>
<tr>
<td>USEMCO</td>
</tr>
<tr>
<td>VAN BERGEN &amp; MARKSON INC.</td>
</tr>
<tr>
<td>VISU-SEWER</td>
</tr>
<tr>
<td>WATERTRONICS INC.</td>
</tr>
<tr>
<td>WI ENTEK INC.</td>
</tr>
<tr>
<td>WI FOCUS ON ENGERGY</td>
</tr>
<tr>
<td>WILLIAM-REID LTD</td>
</tr>
</tbody>
</table>
Why have so many of your friends picked **OPS Systems** for their reporting, maintenance & data management?

**Because it’s EASY!**

OPS software is the easiest to set up, learn, and use. With **OPS 32** you will be entering data, producing reports and graphs all on the first day. **JOB Cal** maintenance software automatically builds a calendar that shows you what needs to be done, what’s coming up and what’s overdue.

**DMR’s are no problem. It’s quick and easy!**
- John Zatopa, Rhinelander WWTP

**OPS Systems** is Wisconsin’s and the nation’s best selling software for plant operations. For a free evaluation CD or to arrange a demonstration, call our rep:

Dorner Company - Milwaukee - 414-355-8685
or E-Mail to Sales@DornerDoes.com

*Operations & Maintenance Software that’s easy to use!*
Operators Third Annual Fisheree

This annual event is planned for the weekend of June 21 and 22. The plan is to camp, fish and eat all weekend for those who can. Plan to come in on Friday night if you can or join the group early Saturday morning. The main event will be a fish fry on Saturday evening, of course that depends on how lucky the fisherman are.

The Operators Fisheree is open to everyone (operators and friends). Location will be at Columbia Park on the East shore of Lake Winnebago. Anyone who is interested can contact Jim Thalke at jtallke@cs.com or 262-246-4915. Thanks, we hope to see you there.

Upcoming Wastewater Meetings & Events

Government Affairs February 27, 2003
Biosolids Symposium March 11, 2003
CSWEA Education Seminar April 8, 2003
Collection System Seminar June 5, 2003

Regional Meetings
West Central - February 11, Baldwin
Southeast February - 13, Grafton
Lake Michigan - February 20, White Law
Southern - February 28, Madison
Northwest - April 11, Solon Springs

See WWOA web site for future meeting dates.

OPERATORS’ SECOND ANNUAL FISHEREE
LAKE WINNEBAGO, JUNE 2002

Herman Ruta proudly shows off his 6# walleye caught last year at the 2nd Annual Operators Fisheree. Join us this year on Lake Winnebago, June 21 & 22

Gerry Wagner cooks some tasty fish for the hungry fisherman at the 2nd annual Operators Fisheree. Come join the fun this year, camp, fish and tell stories.

Herman Ruta and Jim Thalke display a nice catch of walleyes. These were taken Sunday of the 2nd Annual Operators Fisheree. This year’s Fisheree will be held June 21st and June 22nd. Contact Jim Thalke for details.
Need your equipment to work better and last longer? Call Environmental Resources, "The Equipment Doctors". Our team of experienced professionals can make your equipment run at peak performance. For as long as you need it. For the lowest cost, and the best value. Call us for:

- Technical Information and Assistance
- Inspections and Trouble-Shooting
- Repairs and Custom Components
- Capacity and Efficiency Upgrades
- Restorations and Replacements
- Asset Appraisals and Cost Estimates

Service is our business. Our only business.

Lamont J. Albers – Technical Specialist
David J. Naylor – Technical Specialist
Michael R. Sears – Technical Specialist
Robert J. Prusinski – Technical Specialist
Judy L. Tholen – Service Specialist
Joanne M. Roehl – Administrative Coordinator
Michael W. Humcke – Technical Specialist & Consultant

Environmental Resources Inc.
"The Equipment Doctors"
PO Box 786
Pewaukee, WI 53072
800-691-0998
FAX 262-691-0992
erxmwh@aol.com
The annual Spring Biosolids Symposium has been scheduled for Tuesday, March 11, 2003, at the Holiday Inn in Stevens Point. This annual, one-day conference is jointly hosted by WWOA, WDNR, CSWEA and Wisconsin Liquid Waste Carriers Association. The agenda is as follows:

8:20 Welcome - Greg Kester
8:30 PCB Strategy in Wisconsin & Federal Round 2 Update - Dave Taylor
9:15 National Academy of Sciences Biosolids Report Summary and Update - Greg Kester
10:00 Break
10:20 Phosphorus Issues, Non Point Rules, and 590 Update - Larry Bundy, Russ Rasmussen, Sue Porter
11:15 Wastewater and Septage planning issues in St. Croix and Pierce Counties - Jim Schreiber, Pete Skorseth, Ben Morgan & Dave Fodroczi
12:15 Lunch
1:15 Questions and Answers for all morning speakers - Art Peterson, Moderator
1:45 Pro-active strategies for dealing with local ordinances - Paul Kent
2:15 Break
2:35 Site Requests (Do's & Don'ts) - Chad Cook
3:05 DNR Update and closing - Greg Kester
3:45 Adjourn

Affiliations:

- Greg Kester - WDNR
- Dave Taylor - Madison MSD
- Jim Schreiber - City of Hudson
- Pete Skorseth - WDNR - Baldwin
- Ben Morgan - Tri-County Sanitation
- Dave Fodroczi - St. Croix Co. Planning Director
- Sue Porter - DATCP
- Larry Bundy - UW Madison Soils Science
- Russ Rasmussen - WDNR
- Art Peterson - UW Madison Soils Science
- Paul Kent - Municipal Environmental Group
- Chad Cook - WDNR - Oshkosh

WWOA members should receive a brochure with registration instructions by the end of February. If you have any questions, you can contact Greg Kester, Chairman of the organizing committee this year, at (608) 267-7611.
On Thursday, November 7, 2002, the City of Appleton hosted a meeting of the LMD Operators group at Michiels in downtown Appleton. Chairman Don Lintner called the meeting to order at 8:45 a.m. and thanked Chris Shaw from the Appleton WWTP for hosting the meeting and tour of their facility. He also thanked Donohue & Associates and McMahon Associates for providing the donuts, sweet rolls, coffee, juice, water, and other refreshments at break time.

Chairman Lintner introduced Appleton Mayor Tim Hannah who welcomed everyone to the meeting and to the City of Appleton. Mayor Hannah highlighted some of the exciting new developments taking place in the City of Appleton, particularly the construction of a new Performing Arts Center on College Avenue in downtown Appleton.

Chairman Lintner introduced the following people: Tom Kruzick, WWOA Board of Directors; newly-elected Secretary/Treasurer, Laurie Kadlec; new Chairperson, Roy LaViolette; and next year’s newly-elected Vice Chairperson, Bruce Bartel.

The minutes of the August 22, 2002 Bailey’s Harbor meeting and the treasurer’s report were read. Roy LaViolette made a motion to approve the minutes and the treasurer’s report. Jeff Haack seconded the motion. Motion was approved. There was no old business. Nor was there any new business.

Chairman Lintner asked for a round of applause to recognize the Operator Competition Team. The Operator Competition Team did a wonderful job representing the Lake Michigan District by placing 3rd at the state competition. It was a very close competition, also. This year’s team consisted of the following people:

- Roy LaViolette, (Sturgeon Bay - Team Coach);
- Mike Gelhar (Oshkosh), Eric Storm (Manitowoc), Jeff Smudde and Dan Vanden Avond (Green Bay MSD) with Bruce Bartel (Green Bay MSD - Alternate).

There was a WWOA directory available at the meeting. Chairman Lintner requested that those present take a moment to review their entry in the directory for accuracy and to make any changes necessary.

There were also some informational flyers regarding the WWOA website available.
Chairman Lintner requested a round of applause for Wayne Hendrick (who was not able to attend the meeting) in recognition of his fine service to WWOA-LMD over the past three years as the Secretary/Treasurer. Wayne’s hard work and dedication is greatly appreciated. Many thanks, Wayne!

Upcoming meetings are as follows:
- February 20, 2003 - Whitelaw at Seven Lakes Golf Course
- May, 2003 - Brillion
- August 22, 2003 - Ephraim
- November, 2003 - Oshkosh

Jeff Haack also suggested a round of applause for Louis Dresen from New London, to recognize him as winner of the LMD Operator of the Year Award. Congratulations to Louis!

Jeff Haack made a motion to adjourn the meeting, which was seconded by Tom Kruzick. Motion approved. Meeting adjourned at 9:05 a.m.

Following the business meeting there were several technical presentations. First up was Bill Marten from Donohue & Associates with a presentation comparing Class A and B Biosolids Technologies. Next was Tom Vik, from McMahon Associates with a Statewide Assessment of Anaerobic Digestion Cogeneration Cost-Effectiveness Evaluation. This was followed by a presentation by Mike Gerbitz of Donohue & Associates with a discussion about Selection of Headworks Screening Equipment at Green Bay, WI and Fort Wayne, IN. Following lunch, Joe Cantwell from Triad Engineering presented an overview of the "Wisconsin Focus on Energy" project, and Chad Olsen from McMahon Associates described the Preliminary Results of a Benchmarking Study for Energy Conservation in the Water & Wastewater Industry.

The day ended with Chris Shaw presenting a history and description of the Appleton Wastewater Treatment Facility, followed by on-site tours for those interested.

Respectfully submitted,

Laurie Kadlec
Secretary/Treasurer
CRANE AND WINCH SYSTEMS

THE NO. 1 CHOICE OF PROFESSIONALS FOR 24-YRS

FEATURES
1. UP TO 2500 LB. LIFT CAP.
2. BUILT IN 8,000 LB. WINCH
3. UP TO 100 FT. OF CABLE
4. UP TO 5 FT. BOOM REACH
5. MULTIPLE HEIGHT ADJ.
6. TELESCOPIC OUTRIGGERS, DOWN RIGGERS AND TOOL POST CARRIER.
7. BOLT ON INSTALLATION
8. 24,000 LB. DRAW BAR
9. 15 STAGE RUST PROOFING AND PAINT PROCESS.
10. WIDE SELECTION OF MODELS TO CHOOSE FROM FOR PICK UPS, VANS AND LARGER TRUCKS.

3-YR LIMITED WARRANTY

FOR FURTHER DETAILS CALL 1-800-394-4470

TRANSPORT ENGINEERING CO. INC. 765 CLEVELAND AVE. HARTFORD, WI 53027

ELIMINATES OBSTRUCTIVE TRIPODS

* PROVIDES INCREASED SAFETY IN CONFINED ENTRY WORK.
* EXCEEDS ALL APPLICABLE ANSI SAFETY STANDARDS.

CRANE FOLDS INTO IT'S OWN FRAME FOR CONVENIENT STORAGE.

FAX (262)-673-9205
"What do the Political Sea Changes in Madison Mean for State Water Policy?"

By Paul Kent

The elections this fall brought with them the most significant political changes in Madison in nearly two decades. The election of Jim Doyle as the first Democratic governor in 16 years has set in motion a change in political appointments to the DNR and other state agencies. Meanwhile, the political scandals in the legislature have resulted in changed legislative leaders and Republicans taking control of both houses. All of these political changes are taking place against the backdrop of the most severe budget crisis the state has dealt with in years. So what does all of this mean for water policy in the state of Wisconsin?

New Leadership at DNR

Governor Doyle appointed Scott Hassett as the new DNR Secretary. Hassett is an avid outdoorsman and an attorney, although his practice for the most part did not involve environmental law issues. He is the first person from outside of the department to head the agency since Tony Earl in the late 1970s. Hassett recently appointed longtime DNR administrator Jay Hockmuth to lead the Air and Waste Division, but appointed Todd Ambs to head the Water Division. Todd Ambs is another outsider to the department, having most recently served as the executive director for Wisconsin River Alliance over the past four years. The River Alliance, under Ambs’ leadership, has been a strong advocate for dam removal, non-point controls and watershed management. Hassett has yet to appoint a Deputy Secretary or Executive Assistant, two key policy positions within the Agency.

In addition to significant changes in the Agency, there are equally dramatic changes occurring on the Natural Resources Board. The Natural Resources Board is a seven-member board that sets policy and approves DNR rules. The seven members have terms expiring on a staggered basis. Two board members, James Tiefenthaler Jr. and Stephen Willett, have terms that are expiring in May of this year. However, as a result of the political maneuvering over the last several years, the last three board appointments were never confirmed by the Legislature. In one of his first acts as Governor, Doyle terminated all pending non-approved appointments, including the three Natural Resource Board members who had not been confirmed - David Ladd, Herbert Behnke and Howard Poulson. Doyle then appointed three new board members to take their place but Behnke and Poulson have resisted this maneuver. The three new Board members are Jonathan Ela, a Sierra Club member; Alan Grischke, an

- ALMA CENTER, WI - Ayres Associates, Eau Claire, WI
- HARMONY GROVE-OKEE, WI – General Engineering, Portage, WI
- READSTOWN, WI – McMahon Associates, Neenah, WI

TRENDSETTERS...

SANITAIRE/ABJ’S ICEAS PROCESS

A NEW LEVEL OF WASTEWATER TREATMENT IN WISCONSIN

WILLIAM/REID LTD, LLC.
PH: 888-272-1722
FX: 262-255-7495
E: wrltd@execpc.com
attorney from Wausau; and Christine Thomas, a professor of resource management from UW-Stevens Point.

Changes at the Legislature

Both houses of the Legislature have new legislative leadership as a result of the election and political scandal this fall. The Republicans control the Assembly 58 to 41 and John Gard (Peshtigo) is the new Speaker. DuWayne Johnsrud (Eastman) has retained his chairmanship of the Natural Resources Committee in the Assembly. In past sessions, there was a separate Environment Committee which shared natural resources functions. That has been eliminated this term.

On the Senate side, the changes are more dramatic, since the Republicans now hold an 18 to 15 majority. Neil Kedzie (Elkhorn), a former assemblyperson who headed the Assembly Environment Committee, won a Senate seat in his district, and is now the chair of the Senate Environment Committee.

The Budget

By far and away, the biggest policy that will be facing the new Governor, the state agencies and the Legislature is the enormous budget deficit. Estimates of the budget range from two to four billion dollars, and the Governor has already indicated that education and shared revenue will be spared and that taxes will not be raised. The only way to bridge that gap is to have dramatic impacts on other state agency programs, including the DNR. The DNR submitted a proposed budget last fall of $490.8 million and 2,975 positions for FY 2003, including $57.5 million and 700 positions in the Water Division.

The general consensus is that budget cuts are not going to be the routine, across the board belt tightening that normally occurs in a lean year. The budget crisis is of sufficient magnitude that we will be looking at fundamental program changes and the prospect of entire programs being eliminated altogether. It is also likely that in the face of this crisis, the DNR and other agencies will be working to dramatically increase user fees. We have already seen an announcement about hunting and fishing fees going up, and the pending stormwater rule has an extremely aggressive fee schedule for municipal stormwater permits.

What does all of this mean?

The truthful answer to that question is no one knows, but a few educated guesses can be made. First, the Governor’s appointments will result in an agency and board that has a more environmental activist perspective, but not a radical one.
Second, the fact that there are so many people new to the agency also means that policy changes (other than the budget) are not likely to emerge for at least 6 months to a year as the new leadership attempts to get its hands around one of the state’s largest bureaucracies. Moreover, it is unlikely that the Republican-dominated Legislature will allow any radical changes to be made in terms of rule making.

Third, there are likely to be significant changes emerging this spring, not as much as a policy matter, but as a result of the budget. State funding programs, state staffing and new initiatives are likely to be pared back while efforts at exacting more fees for DNR services are likely to increase. Stay tuned, it will be an interesting year.

**Sampling Soils for Testing**

**J.B. Peters, K.A. Kelling, and L.G. Bundy**

*Department of Soil Science*  
*UW-Madison*

The importance of collecting a good soil sample for determining crop nutrient need cannot be overstated. One sample may represent several acres and from that sample about one tablespoon of soil is used to make lime and NPK recommendations. Recently the UW Extension recommendations for soil sample collection were revised. These changes are outlined in Bulletin A2100 which can be purchased for $0.50 from Extension Publications or downloaded in a PDF format from the following website:

http://www1.uwex.edu/ces/pubs/pdf/A2100.PDF.

The important components of the publication are outlined below.

**When to take samples**

Soil samples can be taken at anytime the ground is not frozen, however they are typically collected in the spring or fall when crops are not in the fields. Fall sampling is often favored because this will allow plenty of time for sample analysis and the subsequent calculation of appropriate application rates prior to biosolids application. Where biosolids are applied the soil samples must have been taken within the past four years. It is recommended that a core-sampling tool be used, rather than a shovel or other tool to ensure uniformity.

**Where to take samples**

Collect soil cores in a zig-zag or "W" type pattern over the desired area. Avoid non-uniform locations such as dead or back furrows, near lime or manure piles, adjacent to roads and fencelines, eroded knolls and wet spots, and in cornrows where fertilizer was banded. It is acceptable to sample distinctive areas within larger fields separately if these areas are big enough to treat separately. On contour strips sample each strip separately if it is five or more acres in size. Cores from smaller strips or fields can be combined into the same sample if strips or fields have identical management and cropping history.

**How to take samples**

At least ten cores should be collected per sample, then mixed in a clean pail with about two cups transferred to a clean sample bag. Sample to a uniform depth depending on tillage. Moldboard plowed fields should be sampled to tillage depth, chisel plowed fields should be sampled to the depth of tillage, and no-till fields should be sampled to six inches. The bag should be clearly labeled with the field ID, farmer name, or other information that can be used to identify the sample. Fill out the sample information sheet for each field as completely as possible. Include sample ID, county, soil name of the major soil in the field if available, plow depth, crops to be grown, yield goals, and nutrient credits.

Most fields will be sampled to obtain a single-rate recommendation based on the average of the individual soil sample results. Use the following table to determine the area from which each sample (10 cores) should be collected.

**Recommended sampling intensity for a single-rate recommendation.**

<table>
<thead>
<tr>
<th>Field Characteristics</th>
<th>Size</th>
<th>Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field sampled more than four years ago</td>
<td>All Fields</td>
<td>1 sample per five acres</td>
</tr>
<tr>
<td>Responsive*</td>
<td>All Fields</td>
<td>1 sample</td>
</tr>
</tbody>
</table>

*Responsive* indicates fields that have been field tested in the past.
Non-responsive 5 - 10 2
fields tested 11 - 25 3
within the past 26 - 40 4
four years 41 - 60 5
61 - 80 6
81 - 100 7

*Responsive range is considered to be where either soil test P or K levels are in the high category or lower. Non-responsive means both soil test P and K are very high or excessively high. Each sample is made up of ten cores minimum.

**What to do with soil samples**
Sample and completed information sheets for each field, along with the appropriate payment can be taken to the county Extension office for forwarding to an approved soil testing laboratory. They can also be delivered to the lab in person. The University of Wisconsin operates soil testing laboratories at Madison and Marshfield. Several approved private laboratories exist in the state. A list of these can be requested from either the Madison or Marshfield lab. Additional questions on sampling can be directed to a county agent or either of the laboratories listed below.

**Soil and Plant Analysis Laboratory**
5711 Mineral Point Rd.
Madison, WI 53705
608/262-4364

**Soil and Forage Analysis Laboratory**
8396 Yellowstone Dr.
Marshfield, WI 54449
715/387-2523

*This abstract of A2100 prepared by Dr. Richard Wolkowski, Extension Soil Scientist, UW-Madison (Nov. 2002)*
Management of water and wastewater facilities continues to increase in complexity. Today facility management information systems must address the legal and ethical requirements of environmental regulation, safety regulation, concerns of customers and water resources users.

The past 20 years have seen an increasing use of computers to help manage the growing amount of information required in utility management. Information is required for many diverse functions of the enterprise. A few are listed below:

1. Process Operations
2. Regulatory Reporting
3. Performance Evaluation
4. Laboratory Information Management
5. Quality Assurance and Control
6. Asset Management
7. Predictive and Preventative Maintenance
8. Benchmark Measurements
9. Product Tracking Audits
10. User Charges and Billing
11. Utility Rate Studies

From the earliest computer hardware and software systems through the latest, complexity has been something software engineers, and programmers, have had to fight. Complexity often increases costs while decreasing user acceptance. Low user acceptance results in a decrease in ROI (Return on Investment).

In a typical water or wastewater facility, the application of computers has been a gradual development over the past 20 years. Because many of the systems were implemented on an as needed basis without an overall plan, the resultant overall information systems do not share data. These non-integrated systems are often described as dysfunctional because data management with the computer system makes more work rather than reducing the workload. When system integration is implemented, complex and difficult to maintain system often evolve.

A classic example of unnecessary complexity can be observed in many facilities where real-time data collected by the SCADA system is being shared with plant operations, laboratory and maintenance data. As each level is developed separately, the same data may be subject to different tag name conventions. The following is an example of various tag names all related to a single pump (influent pump no. 1):

```
DI 2201       PLC tag for influent pump 1 run
RTU_A_P1      SCADA software tag name
04887-1       Maintenance System tag name
INFL_P1_R     Data Management pump runtime
```

Having a single naming convention for all software applications throughout the facility decreases the complexity of information and knowledge management throughout the system. Costs for development and the future cost of maintaining the system is greatly reduced. A planned development effort could have resulted in the following example common tag names: (AREA_ITEM_UNIT naming convention)

```
P_INFL_P1     PLC tag- influent pump 1 run
P_INFL_P1     SCADA software tag name
P_INFL_P1     Maintenance System tag name
P_INFL_P1R    Data Management pump runtime
```

When automatically sharing runtime information between the SCADA application and maintenance or data management, common tag names simplify the task. Managers who need to create reports with data from these diverse applications also find that common tag names are much less confusing to work with.

Fighting complexity is not a futile task. Despite chronic lack of attention, much-needed complexity-fighting methods and tools are available. Additional information on reducing the complexity with simple solutions for integrated facility data management is available from IntelliSys Information Systems. (800-347-9977).
Inliner pipeline renewal means:

- Minimal disruption to traffic and municipal life.
- A 50-year structural integrity legacy.
- A custom-fit solution—every time.

Inliner pipeline renewal solutions are provided by local contractors—all over the country. For more information on Inliner, visit www.inliner.net, or call the provider below.

Lametti & Sons, Inc.
16028 Forest Blvd. No., PO Box 477
Hugo, MN 55038
Ph: 651-426-1380
Fax: 651-426-0044
Seems like just yesterday that we were back in La Crosse for that great 36th Annual Conference. Amazingly, planning for the WWOA’s 37th Annual Conference is well underway! Once again this year the Tricks of the Trade event will be offered as part of the Conference activities.

This year we will be at the Kalahari Resort and Convention Center in Wisconsin Dells/Lake Delton. Our conference runs from October 21-24, 2003. We are anticipating a large turnout for this conference for several obvious reasons; great facility, central location, etc. With all the people heading to the Kalahari in October, wouldn’t it be great if we could perhaps have a dozen or more entries in the Tricks of the Trade event?

Surely everyone involved in this ever-changing wastewater industry has had an exceptional idea or two that they have brought to reality in their years of service. It may have saved some time and effort performing WWTP or collection system O&M. An operator invention may have made a hazardous work activity much safer. The entry may be a great public relations tool or even perhaps a custom designed computer application.

You may not think that your idea or invention was or is all that great; however, someone else just might! If that idea or invention helps another fellow operator or two do their job more effectively, safer and with better results - fantastic! This event is the perfect opportunity to showcase those ideas and inventions. Sharing of information and ideas with fellow operators; isn’t that one of the fundamental building blocks of this organization?

Included in this Clarifier issue is the newly revised 2003 Tricks of the Trade entry form. A friendly reminder that no entries will be accepted if it is determined that the entry item(s) are commercially available for purchase. Deadline for submittal is August 31, 2003. Submit early and often.
Your professional choice...

practical, efficient, experienced

Eau Claire  
(715) 834-3161

Madison  
(608) 249-0471

Green Bay  
(920) 498-1200

Waukesha  
(262) 523-4488

www.AyresAssociates.com

Engineers/Architects
Scientists/Surveyors

AYRES ASSOCIATES
Scott Hassett named DNR Secretary

On Monday, December 23, 2002, Gov.-elect Jim Doyle appointed Madison attorney and outdoor enthusiast P. Scott Hassett as DNR Secretary. At a press conference in the Transition Office, Gov.-elect Doyle commented on this cabinet appointment. "Scott Hassett is a committed conservationist, an avid hunter and fisherman, and an experienced champion of the natural resources issues facing Wisconsin. Scott will draw on his experience and knowledge to ensure that we protect and preserve Wisconsin’s rich natural resources for future generations," he said.

An accompanying news release provided the following biography on Secretary-designee Hassett: "Scott Hassett, 52, is a partner and attorney at Lawton & Cates, S. C. He has worked at Lawton and Cates for the past 22 years, handling civil, criminal and employment litigation cases statewide and environmental litigation cases on issues ranging from toxic torts to environmental pollution.

"He is a former chair and current member of the Board of Directors of the Natural Resources Foundation of Wisconsin. The Foundation awards grants for environmental and educational projects and has made a major commitment to the reintroduction of whooping cranes in Wisconsin. He is a former managing editor at the Jefferson Banner in Jefferson, WI. An avid hunter and fisherman, Hassett is a member of Wisconsin Bowhunters, Ducks Unlimited, Oak Ridge Rifle Club, and Bentshaft Bowhunters Club, and is a former president of the Wisconsin River Sportsman Club. He has also served as the political advisor/legal counsel for Muskies, Inc.

"He graduated from UW-Oshkosh in journalism in 1974 and received a law degree from Rutgers University in 1980. Hassett and his wife, Chris, live in Madison and have a daughter and son."

At the press conference, Hassett saluted Darrell Bazzell for his work, and indicated he had long admired former DNR secretaries Tony Earl, Buzz Besadny, George Meyer and Darrell for their DNR work. He noted that he was hired by and had an office next to long-time Natural Resources Board member John Lawton, and came to appreciate the depth and importance of environmental and natural resources issues through Lawton. He called Lawton one of his three mentors, also including his father, Paul Hassett (former executive secretary to Governor Knowles and past president of the Wisconsin Association of Manufacturers and Commerce), and former Gov. Warren Knowles who used to take him hunting and fishing.

Hassett also indicated he wanted to immerse himself in DNR issues and visit DNR offices around the state. He indicated it was too early to comment on any other personnel changes in DNR. He also noted that because he hunts in Cross Plains, he is keenly aware of CWD and the importance of that issue to DNR.
Don’t Get Caught With Your Pumps Down!

This is the last place you want to be –

performing emergency repairs on your lift station or treatment facility pumps. There is an easy way to avoid this problem. Get regularly-scheduled preventive maintenance from L.W. Allen.

For over 60 years, L.W. Allen has been keeping wastewater pumps in their prime. Our skilled technicians make a thorough inspection of your pumps. They perform manufacturer’s recommended adjustments and lubrication. When they’re finished your pumps are in A-1 condition and ready to perform.

If there is a problem with your pumps, we can fix it. L.W. Allen maintains a large in-stock inventory of pumps and pump replacement parts at all times. Which gives us a chance to repair or replace your pump BEFORE it becomes a bigger problem.

Don’t get caught with your pumps down.
Call L.W. Allen today, at:

800-362-7266

L.W. ALLEN, INC
4633 Tompkins Drive • Madison, WI 53716 • TEL (608) 222-8622 • FAX (608) 222-9414
The WWOA Technical Program Committee is once again promoting the Tricks of the Trade event as part of the 2003 Technical Program. The 37th Annual WWOA Conference will be held October 21-24, 2003 and hosted by Wisconsin Dells/Lake Delton WWTP.

The Tricks of the Trade event provides an opportunity for WWOA members to showcase inventions they have used to solve common, everyday problems encountered in their places of employment. Event submittals may originate from work activities in WWTP labs, maintenance shops, collection systems, plant processes, etc. An invention idea considered "simple" by one operator may; in fact, be considered significant if that invention is shared and helps solve and/or enhance fellow operator work activities.

The Kalahari Resort and Convention Center will serve as this year’s host location for many of the conference activities. Planning is well underway for what will undoubtedly be a very well attended Conference. In order to secure adequate space for the event, the Technical Program Committee asks that interested members "pre-register" by completing the sign-up sheet below. You can enter several ways: email, mail or fax your information to Technical Program Committee Chair Tim Nennig at the contact information listed below.

**Deadline for Tricks of the Trade registrations is August 31, 2003**

*** No event submittals may be commercially available for purchase! ***

Name: ___________________________ Employer: ___________________________

Address: ___________________________ Phone: ___________________________

C/S/Z ___________________________ E-mail: ___________________________

Briefly describe your presentation: _______________________________________

______________________________________________________________________

______________________________________________________________________

______________________________________________________________________

Describe table and/or floor space needed; other requested exhibit needs:

______________________________________________________________________

______________________________________________________________________

Submit entries to:

Tim Nennig  
Technical Program Committee Chair  
Grafton W&WW Utility  
P.O. Box 144  
Grafton, WI 53024

(w) 262-375-5330  (f) 262-375-6938  timnenn1@execpc.com
Throughout the water and wastewater industry, Energenecs has long been associated with long lasting, high quality products...but we can offer you so much more. Our knowledge and experience in SCADA and related control system integration will make your water and wastewater systems more reliable and more energy efficient. We will also help you save money and serve your community more effectively.

Call the control system integration specialists today.
Call Energenecs.
(262) 377-6360.
Or visit our web site at www.energenecs.com
WISCONSIN WASTEWATER OPERATORS’ ASSOCIATION, INC.
2002 - 2003 OFFICIAL DIRECTORY

Dale Neis, President
1045 Northpark Court
P.O. Box 512
Dickeyville, WI  53808
Work  608/568-3151
Fax  608/568-7237
Home  608/568-3436
neisguy@pci2.net

Randy Herwig, President Elect
Lodi WPCF
113 S. Main Street
Lodi, WI 53555
Work  608/592-3247
Fax  608/592-3271
Home  608/592-5350
rherwig@wppisys.org

Tim Nennig, Vice President
Grafton Water & Wastewater
P.O. Box 144
Grafton, WI  53024
Work  262/375-5330
Fax  262/375-6938
Home  262/377-4756
timnenn1@execpc.com

Judy Tholen, Past President
Environmental Resources Inc.
P.O. Box 786
Pewaukee, WI  53072
Work  262/691-0998
Fax  262/691-0992
Home  920/285-3450
erxjtholen@aol.com

John Bond, Director (04)
Roberts WWTP
107 East Maple Street
Roberts WI 54023
Work 715/749-3175
Fax 715/749-3889
Home 715/796-5263
rbtswwtp@pressenter.com

Pete Conine, Director (03)
Waukesha Wastewater Treatment
600 Sentry Drive
Waukesha, WI  53186
Work  262/524-3626
Fax  262/524-3632
Home  262/650-6298
pconine@ci.waukesha.wi.us

Tom Kruzick, Director (03)
Oshkosh WWTP
233 Campbell Road
Oshkosh WI. 54901-3488
Work  920/232-5365
Fax  920/232-5366
Home  920/725-0897
Tkruzick@ci.oshkosh.wi.us

Kay Marshall, Director (03)
SEH Inc.
1701 Knapp Street
Rice Lake, WI  54858-1350
Work:  715/236-4018
Fax  715/236-4099
Home:  715/837-1282
kmmarshall@sehinc.com

Jim Thalke, Director (04)
Sussex Regional WPCF
N64W23760 Main Street
Sussex WI 53089
Work  262/246-5184
Fax  262/246-4915
Home  262/246-0921
jtalke@cs.com

Richard McKee, Executive Secretary
WWOA
416 Herman Street
Arena, WI  53503
Home  608/753-9362
Fax  608/753-9363
Work  608/795-0024
rdrmckee@charter.net

2003 Convention Contacts
Local Arrangements
Gil Hantzsch - 608/356-2771

Technical Program
Tim Nennig - 262/375-5330

Guest Program
Kim Wolner - 608/254-3985

Clarifier Staff
Jean Van Sistine  920/438-1057
jvansistine@gbmsd.org
Dan Busch  920/438-1101
dbusch@gbmsd.org
Jeff Haack  920/492-5811
haackj@dnr.state.wi.us