



Minnesota Pollution
Control Agency

76th Annual

Wastewater Operations Conference



March 20-22, 2013

Marriott Northwest, Brooklyn Park
(formerly Northland Inn)

Welcome

Welcome to the 76th Annual Wastewater Operations Conference. Forty-one people attended the very first Wastewater Annual on March 17-19, 1938, held in conjunction with the *Water Works School* at the University of Minnesota Center for Continuing Study. The *Water Works School* ran from Monday to Wednesday and *Sewer School* from Thursday to Saturday. A \$2.00 registration and a \$3.00 tuition fee were charged for the *Sewer School*. Those attending both paid \$8.00. Sleeping rooms at the Center cost up to \$2.00 per day. In 1967, the Minnesota Pollution Control Agency (MPCA) was created and given responsibility for holding the *Sewer School* and developing other wastewater training activities. The name was changed to *Wastewater Operations Conference* in 1970.

We appreciate and gratefully acknowledge all who were involved in putting on this program – the Planning Committee, speakers, presenters, presidents, and vendors. We would also like to thank the St. Cloud Technical College students for volunteering their time.

And we thank you – the attendees and participants – for your support, without which, the efforts of the others would be in vain. Enjoy the conference!

The Training Team

*Charlie, Emily, Gene, Steve,
Dianne, Kay, Nancy, John*

Attendance sheets

To receive certification contact hours, you must sign an attendance sheet for each session you attend. Attendance sheets will be available at the end of each session.

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General Information

Lunch – Your name badge is required for lunch Wednesday and Thursday in the atrium. (No lunch on Friday.)

Breaks – Breaks held in the hallway.

Smoking – Smoking is not allowed in the hotel.

Calculators – The exam refresher sessions are working sessions and require a calculator.

Contact hours – To receive 16 direct contact hours, you must attend Wednesday until 4:30 pm, Thursday until the award ceremony is over, and Friday until noon. Those attending the conference and the entire biosolids session will receive 9 biosolids contact hours and 7 wastewater contact hours.

Ticket for drawing – Pick up your ticket for the vendor prize drawing at the registration table by 4:00 pm Wednesday; prizes awarded during the Thursday vendor session. Must be in the room to win.

Ask MPCA – MPCA staff will be available Wednesday and Thursday in the lobby across from the registration area to answer your questions.

Wednesday at-a-glance

Welcome in Northland Ballroom

Minnesota Wastewater Operators Association – Linda Mullen, Todd Carlson, MWOA

The Fire Chief Project – Ted Rulseh, TPO Magazine

Break

8:30 am	Minnesota Rm Salon 1	Minnesota Rm Salon 2	Arbor Lakes	Hennepin Ballrm Salon 1	Hennepin Ballrm Salon 3	Elm Creek Amphitheater
8:45 am	Stabilization Ponds	Lab Certification	Tips for Successful Industrial & Municipal Stormwater Mgmt	So you failed your Wet Test – now what?	A/B Exam Refresher	C/D Exam Refresher
9:30 am	Lunch in atrium					
10:00 am	Minnesota Rm Salon 1	Minnesota Rm Salon 2	Arbor Lakes	Hennepin Ballrm Salon 1	Hennepin Ballrm Salon 3	Elm Creek Amphitheater
10:30 am	Biosolids – Agronomic Insights	DMRs & Monitoring Requirements	New Plants/Upgrades	Emerging Issues	A/B Exam Refresher	C/D Exam Refresher
12:00 pm	Adjourn					
1:00 pm						
4:30 pm						

Wednesday morning

General Session

Northland Ballroom

Presiding: Rick Ashling

- 8:30 Welcome – *Charles Thompson, Emily Armistead, MPCA*
- 8:45 Minnesota Wastewater Operators Association – *Linda Mullen, Todd Carlson, MWOA*
- 9:00 The Fire Chief Project – *Ted Rulseh, TPO Magazine*
- 10:00 Break

Class C & D Exam Refresher

Elm Creek Amphitheater

Presiding: Steve Duerre

- 10:30 Essential math – *Steve Duerre*
- 11:15 Detention time – *Corey Mathisen*

Lab Certification

Minnesota Room Salon 2

Presiding: Sandy McDonald, Kay Curtin

- 10:30 MPCA Lab Registration Program update – *Sandy McDonald, Kay Curtin*

So you failed your Wet Test – now what?

Hennepin Ballroom Salon 1

Presiding: Deb Lindlief

- 10:30 WET, TRE (and TIE) – Let Us Translate for You! – *Mike Anderson, Dann White, Kelly Yahnke*
- 11:30 Water Quality Standard Variances – what, why, when, and how? – *Elise Doucette*

Stabilization Ponds

Minnesota Room Salon 1

Presiding: Brad Gillingham, Gene Erickson

- 10:30 Chemical application at Pipestone Ponds – *Sara Pankonin*
- 11:15 Use of aquatic herbicides to manage aquatic plants – *John Skogerboe*

Wednesday morning

Tips for Successful Industrial and Municipal Stormwater Mgmt **Arbor Lakes**

Presiding: Marni Karnowski

- 10:30 Industrial stormwater – *Melissa Wenzel*
- 11:00 Municipal stormwater – *Marni Karnowski*
- 11:30 A city's perspective – *Matt Durand*

Class A & B Exam Refresher **Hennepin Ballroom Salon 3**

Presiding: Larry Rogacki

- 10:30 Math and concept review will be presented to prepare for the Class A and B wastewater exam. Must be registered separately for this session. Class is limited to 50. Check the class list on the bulletin board to see whether you are enrolled.

Wednesday afternoon

Class C & D Exam Refresher **Elm Creek Amphitheater**

Presiding: Gene Erickson

1:00 Collection system overview – *Dave Sahli*

Class D exam refresher **Elm Creek Amphitheater**

1:45 Wastewater treatment overview –
Kay Curtin

2:15 Stabilization ponds – *Gene Erickson*

3:15 On-site systems – *Corey Mathisen*

3:45 Class D review – *Corey Mathisen, Kay Curtin*

Class C exam refresher **Northland Ballroom Salon 2**

Presiding: Steve Duerre

1:45 Trickling filters/RBCs – *Scott Knowles*

2:30 Activated sludge – *Kay Curtin*

3:30 Digestion – *Steve Duerre*

4:00 Disinfection – *Gene Erickson*

DMRs & Monitoring Requirements – What this means for you! **Minnesota Room Salon 2**

Presiding: Belinda Nicholas

1:00 DMRs 101 – *Jaramie Logelin*

1:30 eDMRs – *Jaramie Logelin*

2:00 eDMRs of the future – *Deb Lindlief,
Mary Kimlinger*

3:00 Monitoring requirements – additional
monitoring, salty discharge, mercury,
phosphorus & Wet testing – *Deb Lindlief*

3:45 Annual permit compliance summaries –
Leslie Goldsmith

Class A & B Exam Refresher **Hennepin Ballroom Salon 3**

Presiding: Larry Rogacki

1:00 Two-day session continues.

Wednesday afternoon

Biosolids – Agronomic Insights

**Minnesota Room
Salon 1**

Presiding: Jorja DuFresne

- 1:00 Introduction – *Jorja DuFresne*
- 1:15 Agricultural use of biosolids and IBPs –
Troy Salzer
- 2:00 Rochester's new equipment – increased
efficiency, savings and GPS use – *Dave Lane*
- 2:30 Update – New Ulm's agronomic endeavors –
Dan O'Connor
- 3:00 Update – Marshall's Biosolids Program/
charging for application – *Bob VanMoer,*
Larry Polfliet
- 3:45 Phosphorus based biosolids use – farmers
perspectives – *Matt Wolle*
- 4:15 Q & A

Emerging Issues

Hennepin Ballroom Salon 1

Presiding: John Friel

- 1:00 Municipal wastewater treatment as a
potential solution for antibiotic resistance –
Dr. Tim LaPara
- 2:00 Overview of research related to wastewater
at the University of Minnesota – *Tucker Burch*
- 2:30 Updates on the chloride and sulfate wild rice
standard – *Phil Monson*
- 3:00 Nitrogen in Minnesota surface waters –
Steve Weiss
- 3:30 Emerging technology overview: "It's not a
PBR, it's an MBR" – *John Friel*

New Plants/Upgrades

Arbor Lakes

Presiding: Jerry Balbach, Kelly Yahnke

- 1:00 Full of hot air – New Ulm WWTF aeration &
blower upgrades – *Dan O'Connor,*
Seth Peterson
- 1:50 Princeton WWTF – *Dustin Maas*
- 2:40 Waseca WWTF improvements – *Ron LaFond*
- 3:30 MCES Blue Lake Plant improvements project
– *Dave Simons*

Thursday at-a-glance

8:00 am A/B Exam Refresher begins

8:30 am **Vendor/Professional Organization Displays - Northland Ballroom** (Prizes awarded; must be present to win.)

Ask MPCA and Wastewater Plants Highlights Poster Session - Registration Lobby

9:00 am	Minnesota Rm Salon 1	Minnesota Rm Salon 2	Arbor Lakes	Hennepin Ballrm Salon 1	Hennepin Ballrm Salon 3	Elm Creek Amphitheater
					A/B Exam Refresher	C/D Exam Refresher
11:30 am	Lunch in atrium					
12:30 pm	Minnesota Rm Salon 1	Minnesota Rm Salon 2	Arbor Lakes	Hennepin Ballrm Salon 1	Hennepin Ballrm Salon 3	Elm Creek Amphitheater
	Biosolids – Operators’ Forum	Financial Assistance	Pretreatment	Leadership	A/B Exam Refresher	C/D Exam Refresher
3:45 pm	Certificate of Commendation Awards in Northland Ballroom					

Thursday morning

Vendor/Professional Organization Displays

Northland
Ballroom

*Presiding: Gene Erickson, Emily Armistead,
Dianne Navratil*

8:30 – 11:30 am An opportunity to discuss products and view vendor demonstrations; drawing for prizes.

Exhibitors as of 3/7/2013:

Able Hose & Rubber	MWOA
ABM Equipment	PeopleService
Alden Pool & Municipal Supply	Quality Flow Systems
Bolton & Menk	Ritter & Ritter Sewer Service
Construction Specialties	RMB Environmental Laboratories
Dakota Pump & Control	Servocal Instruments
DeWild Grant Reckert & Assoc	Short Elliot Hendrickson
Electric Pump	Social Security Administration
Elliott Equipment	Stantec Engineering
Fergus Power Pump	Swanson Flo-Systems
Flexible Pipe Tool	Team Lab Chemical
Foth Infrastructure	Tech Sales
General Repair	TKDA
Hach Company	TPO Magazine
Hawkins	Treatment Resources
HD Supply Waterworks	Tri-State Pump & Control
ICS Healy Ruff	UC Laboratory
Infratech	Ulteig Engineers
Insituform Technologies	VanBergen & Markson
Kodru Equipment	Veit & Company
MPCA Emergency Response	Vessco
MRWA	WEXCO Environmental
MSRS	WSB and Associates
MVTL	W.W. Goetsch Associates

Class A & B Exam Refresher

Hennepin
Ballroom Salon 3

Presiding: Larry Rogacki

8:00 Two-day session continues.

Wastewater Plants Highlights Poster Session

Registration
Lobby

Presiding: Norm Miranda, Doug Larson

8:30 – 11:30 Displays of a variety of wastewater facilities around Minnesota

Thursday morning

Ask MPCA

Registration Lobby

8:30 – 11:30 MPCA staff will be available to discuss concerns, permit requirements, monthly reports, etc.

Class C & D Exam Refresher

Elm Creek
Amphitheater

Presiding: Kay Curtin

10:00 Study hall and individual assistance

11:30 – Lunch

Thursday afternoon

Biosolids – Operators’ Forum **Minnesota Room Salon 1**

Presiding: Jorja DuFresne

- 12:30 Albert Lea’s program and switching to contract application – *Rick Ashling*
- 1:00 Zumbrota’s program and field measurement technique – *Rick Lohmann*
- 1:30 Starbuck’s program changes and adding upstairs storage – *Paul Christensen*
- 2:00 Looking for sites, public relations and safety – *Jim Peterson*
- 2:30 A study of Marshall’s ATAD biosolids – proves value to local farmers – *Sherri Westphal*
- 3:00 Recordkeeping and site records with Google Earth – *Glen Lund*

Financial Assistance **Minnesota Room Salon 2**

Presiding: Bill Dunn

- 12:30 Clean Water Legacy and other state funding programs – *Bill Dunn*
- 1:05 Money makes the world go round – *Becky Sabie*
- 1:40 CRWF/Legacy money financing – *Kris Swanson, Paul Saffert*
- 2:15 An engineer’s experience with project funding – *Jessica Werder*
- 2:50 The PFA experience: projects, funding, attitude – *Tom Dye*

Leadership **Hennepin Ballroom Salon 1**

Presiding: Kevin Thompson

- 12:30 Taking your turn at the head of the V – *Rich Thul*

Thursday afternoon

Pretreatment

Arbor Lakes

Presiding: Tom Baltutis, Kara Hible

- 12:30 Identifying major industrial contributors to WWTP – *Jaramie Logelin*
- 1:00 Phew! Controlling odors and corrosion from hydrogen sulfide – *Ray Pierce*
- 2:00 Basic pretreatment strategies for industrial wastewater – *Mike Oldsberg*
- 2:30 Oil and grease control in lift stations – *Ray Pierce*
- 3:00 Tracking down sources of toxicity – *Tom Baltutis*

Class A & B Exam Refresher

Hennepin Ballroom
Salon 3

Presiding: Larry Rogacki

- 12:30 Math and concept review will be presented to prepare for the Class A and B wastewater exam.

Class C & D Exam Refresher

Elm Creek
Amphitheater

Presiding: Kay Curtin

- 12:30 Geometric mean – *Gene Erickson*
- 12:45 Pond discharge math – *Gene Erickson*
- 1:15 Percent removal/loading/population equivalent – *Dave Sahli*
- 2:00 Pump calibration – *Steve Duerre*
- 2:45 Jeopardy review – *MPCA staff*

Awards

Northland Ballroom

Presiding: Jaramie Logelin

- 3:45 Certificate of commendation award ceremony: Awards presented to all in compliance with permit requirements. See the recipient list posted on the bulletin board in the registration area.

7:30 am **Breakfast**

8:00 am **Peril in the Ponds: Deformed Frogs, Politics, and a Biologist's Quest – Judy Helgen**

9:00 am	Minnesota Rm Salon 1	Minnesota Rm Salon 2	Arbor Lakes	Hennepin Ballrm Salon 1	Elm Creek Amphitheater
	Biosolids Basics	Safety	Retirement	Emergency Response	Certification Exams
12:00 pm	Conference adjourns				
1:00 pm	Exams end				

Friday morning

General Session

Northland Ballroom

Presiding: Rick Ashling

7:30 Breakfast

8:00 Peril in the ponds: deformed frogs, politics, and a biologist's quest – *Dr. Judy Helgen*

Certification Exams

Elm Creek
Amphitheater

Presiding: Dianne Navratil

9-1:00 Bring calculators & pencils; formulas provided.
See exam list on bulletin board at registration area to make sure your application has been accepted.

Biosolids Basics Minnesota Room Salon 1

Presiding: Jorja DuFresne

9:00 Through the Inspector's Eyes –
Craig Weingart

9:30 Keys to Public Relations – *Matt Montain*

10:00 Wadena – insights and the new plant –
Dan Kovar

10:30 Biosolids Tool Version 3/site approvals/
annual reporting/other basics –
Jorja DuFresne

Safety

Minnesota Room Salon 2

Presiding: Jim Miller

9:00 Introduction to safety – What training do I need? – *Jim Miller*

9:30 Traffic control – short term projects –
George Linngren

10:15 Trenching – competent person –
Chad Peterson

11:00 Arc Flash Safety – Albert Lea case history –
Mike Johnson, Rick Ashling

Friday morning

Emergency Response **Hennepin Ballroom Salon 1**

Presiding: Craig Schafer

- 9:00 Activation, mobilization, response,
de-mobilization: "The ER Cycle" –
Brett Collier, Marty Glynn, Frank Stuemke
- 10:00 Impact of the flood on the City of Thomson –
Robert Walton
- 11:10 Shared operations/operators: The benefits
and pitfalls (during a disaster) – *Derek Wolf,*
CJ Van Guilder, Frank Stuemke

Retirement **Arbor Lakes**

Presiding: Gene Erickson

- 9:00 Ten most asked questions about Social
Security – *Jim Czechowicz*
- 10:00 Minnesota State Retirement System's
General Plan Pension – *Robert Fahnhorst,*
Kirk Soland
- 11:00 Your benefits with PERA – *Phil Coleman*

12:00 – Conference adjourns

(no lunch)

Presenters / *Planners

- Anderson, Mike – *MPCA St. Paul*
*Armistead, Emily – *MPCA St. Paul*
*Ashling, Rick – *City of Albert Lea*
*Balbach, Jerry – *MVTL*
*Baltutis, Tom – *Hawkins Chemical*
Burch, Tucker – *U of M*
Carlson, Todd – *MWOA, City of Duluth*
*Christensen, Paul – *PeopleService*
Coleman, Phil – *Public Employees Retirement Assoc*
Collier, Brett – *City of Barnum*
*Craft, Angella – *MCES*
*Curtin, Kay – *MPCA St. Paul*
Czechowicz, Jim – *US Social Security Administration*
*Dahl, Tami – *MPCA Marshall*
Doucette, Elise – *MPCA St. Paul*
*Duerre, Steve – *MPCA St. Paul*
*DuFresne, Jorja – *MPCA St. Paul*
*Dunn, Bill – *MPCA St. Paul*
Durand, Matt – *City of Owatonna*
Dye, Tom – *Stantec*
*Erickson, Gene – *MPCA St. Paul*
Fahnhorst, Robert – *MN State Retirement System*
*Friel, John – *SEH*
*Gardner, Dave – *MCES*
*Gillingham, Brad – *MPCA Marshall*
*Gilbertson, Scott – *City of Melrose*
Glynn, Marty – *MnWARN*
Goldsmith, Leslie – *MPCA St. Paul*
*Haag, Del – *Bolton & Menk*
Helgen, Dr. Judy – *MPCA (retired)*
*Hible, Kara – *Fremont Industries*
Johnson, Mike – *Foth Infrastructure*
*Kammerer, Doug – *City of Watertown*
*Karnowski, Marni – *MPCA St. Paul*
Kimlinger, Mary – *MPCA St. Paul*
Knowles, Scott – *MPCA Duluth*
Kovar, Dan – *City of Wadena*
LaFond, Ron – *Stantec*
Lane, Dave – *City of Rochester*
LaPara, Tim, Dr. – *U of M*
*Larson, Douglas – *City of New Prague*
*Lindlief, Deb – *MPCA Duluth*
Linngren, George – *City of Blaine*
Logelin, Jaramie – *MPCA Duluth*
Lohmann, Rick – *City of Zumbrota*
Lund, Glenn – *City of Windom*
Maas, Dustin – *SEH*
Mathisen, Corey – *MPCA St. Paul*
McDonald, Sandy – *MPCA St. Paul*
*Miller, James – *Foth Infrastructure*

Presenters / *Planners

- *Miller, Tim – *Electric Pump*
- Miranda, Norm – *HR Green Inc.*
- Monson, Phil – *MPCA St. Paul*
- Montain, Matt – *Mountain Environmental*
- Mullen, Linda – *MWOA, City of Burnsville*
- *Navratil, Dianne – *MPCA St. Paul*
- Nicolas, Belinda – *MPCA St. Paul*
- *O'Connor, Dan – *City of New Ulm*
- *Okerstrom, Mitch – *Fergus Power Pump*
- Oldsberg, Mike – *Fremont Industries, Inc.*
- Pankonin, Sara – *Banner Assoc., Inc.*
- Peterson, Chad – *SafeAssure*
- Peterson, Jim – *Fergus Power Pump*
- Peterson, Seth – *Bolton & Menk*
- Pierce, Ray – *Hawkins Inc.*
- Polfliet, Larry – *City of Marshall*
- *Rogacki, Larry – *MCES*
- Rulseh, Ted – *TPO Magazine*
- Sabie, Becky – *MN Public Facilities Authority*
- Saffert, Paul – *Bolton & Menk*
- *Sahli, Dave – *MPCA St. Paul*
- Salzer, Troy – *U of M*
- *Schafer, Craig – *MPCA Marshall*
- Simons, Dave – *MCES*
- Skogerboe, John – *US Army Engr Research & Dev. Center*
- Soland, Kirk – *MN State Retirement System*
- Stuemke, Frank – *MRWA*
- Swanson, Kris – *Bolton & Menk*
- *Thompson, Charles – *MPCA St. Paul*
- *Thompson, Kevin – *MMUA*
- Thul, Rich – *MPCA St. Paul*
- Van Guilder, CJ – *City of Carlton*
- Van Moer, Bob – *City of Marshall*
- Walton, Robert – *WLSSD*
- Weingart, Craig – *MPCA Rochester*
- Weiss, Steve – *MPCA St. Paul*
- Wenzel, Melissa – *MPCA St. Paul*
- Werder, Jessica – *SEH*
- Westphal, Sherri – *Thermal Process Systems*
- White, Dann – *MPCA St. Paul*
- Wolf, Derek – *Thompson Public Works*
- Wolle, Matt – *Farmer*
- *Yahnke, Kelly – *Bolton & Menk*

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