



**ALBERTA WATER & WASTEWATER
OPERATORS ASSOCIATION**

41st Annual Seminar

March 14-18, 2016

Banff Park Lodge, BANFF

**ALBERTA WATER & WASTEWATER
OPERATORS ASSOCIATION
2015 - 2016 EXECUTIVE**

Nancy McAteer, Chair

Town of Penhold

Bert J. Miller, Vice Chair

City of Red Deer

Quentin Syryda, Past Chair

ALPAC, Public Facilities Category

Allan Kendrick

Town of Drumheller

Andy Bebbington

Town of Devon, WCWWA Representative

Darren Demchuk

NAIT

Dave Harrison

County of Forty Mile No. 8

Dwayne Cikaluk

Alberta Capital Region Wastewater Commission

Ed Spohr

EPCOR Water Services

Garth Carl

Henry Kroeger Regional Water Commission

George Wybenga

EPCOR Water Services

Norm Grexton

Life Member

Paresh Dhariya

Town of Devon

Ryan Ropcean

Aquatera Utilities

Tanya Hunter

Alberta Environment

Tim Gourlay

TSAG – Circuit Rider – Training

AWWOA Staff

Dan Rites, Executive Director

Cathie Monson, Training Program Coordinator

Kirstin Mihaychuk, Member Services

MONDAY - March 14, 2016

**Pre Seminar Workshops (Pre-Registration Required)
Rocky Mountain Resort, 1029 Banff Avenue**

Workshop #1 - 8:30 – 12:00 Noon (0.3 CEUs) Funding Maintenance and Upgrades at Water and Wastewater Facilities

Learn processes for identifying, developing and communicating asset investment needs using tools like drinking water safety plans, cost benefit analysis and templates including a simple business case form.

Presenters: - Alvin Beier, Senior Drinking Water Specialist, Associated Engineering; Grant Dixon, Group Manager ATAP; Garry Drachenberg, Vice President Water Solutions, Associated Engineering

Workshop #2 - 8:30 – 12:00 Noon (0.3 CEUs) Security Management for Municipal Waterworks, Wastewater & Storm Drainage Systems

Interactive workshop on universal security management principles regarding governance; security risk management (asset classification and threat, vulnerability & risk assessments); control systems; physical security; security procedures; incident response; and training.

Presenter: Myles Toews, President of Tocra Inc.

12:00 - 8:00 pm Registration - Hotel Lobby

Workshop #3 - 1:00 – 4:30 (0.3 CEUs) Risk Management for Water and Wastewater Capital Projects

Whether you are leading, working on or wanting to take a more active role in projects, this session will provide you with risk management knowledge and information that you can apply immediately.

Presenters: Tracy Allen, P.Eng., MBA, M.Eng., PMP and Sue Howard, P.L.Eng., PMP

Workshop #4 - 1:00 – 4:30 (0.3 CEUs) Biological Nutrient Removal: Do's & Don'ts of Operation

An operator oriented, interactive workshop on the day to day operation of a conventional Biological Nutrient Removal (BNR) facility with individual and group review activities.

Presenters: Lalith Liyanage, Ph.D., P.Eng., Stantec; and Lindsay Johnson M.Sc., EWMCE

3:00 - 9:00 pm Trade Show Displays - Open for Viewing

Silent Auction - Pine Room

**5:00 - 9:00 pm Trade Show
Beer/Wine and Pizza Reception**

TUESDAY - March 15, 2016

8:00 - 4:00 pm **Registration** - Hotel Lobby

8:30 – 12:00 noon **Pre Seminar Workshops**
(Pre-Registration Required)

Rocky Mountain Resort, 1029 Banff Avenue

Workshop #5 - 8:30 – 12:00 Noon (0.3 CEUs)

WSER – Follow a Sample from the Source to the Lab

High-level review of the WSER regulations followed by summaries of the methodologies used to analyze required parameters. Sampling containers and preservation schemes and details on how to submit samples for the parameters, chain of custody, bottle packing, sample integrity.

Presenter: Kristopher Beaudet, B.Sc., P.Chem., Maxxam Analytics

Workshop #6 - 8:30 – 12:00 Noon (0.3 CEUs)

Implementing 4.0 Log Virus Inactivation in Your Small System

If you are new to a system that is doing CT for viruses or if your system has recently been required to meet the 4.0 log virus inactivation requirement, this workshop is for you. Review of breakpoint chlorination and how it affects small drinking water treatment systems. Discussion on 4.0 log (99.99%) inactivation of viruses in all groundwater and the math associated with calculating chlorine contact time.

Presenters: Aaron Janzen, DWOS, Alberta Environment and Parks; Craig Drake, Aquatech Canadian Water Services

10:00 - 4:00 pm **Trade Show Displays** - Open for Viewing

10:00 - 5:00 pm **Silent Auction** - Pine Room

12:00 - 1:30 pm **Delegate Lunch** - In Display Area



After the Seminar, an evaluation will be emailed to you.

The **AWWOA** values your input.

Your input will make the seminar experience even better next year.

WEDNESDAY - March 16, 2016

8:30 - Noon **REGISTRATION** – Hotel Lobby

9:00 - 9:30 am **Official Opening** - Ballroom
Nancy McAteer, Chair, Alberta Water &
Wastewater Operators Association

10, 20, 30 Year Membership Awards

MORNING SESSIONS – Banff Park Lodge Ballroom

**Messages and Updates from Alberta
Water & Wastewater Stakeholders**

9:30 - 9:45 am **Greetings from the Drinking-Water and
Wastewater Section**
Jeff Charrois, Manager, Drinking-Water
and Wastewater Section, AEP

9:45 - 10:00 am **Certification Hints and Tips**
Tanya Hunter, Drinking-Water and
Wastewater Certification Program Lead,
AEP

10:00 - 10:15am **COFFEE - Alpine Meadows**

10:15 - 10:40am **Drinking Water Safety Plan – Generic
Risk Control Measures**
Donald Reid, Drinking-Water Quality
Regulator, AEP

10:40 - 11:00am **Alberta Health’s Role; and Relationship
with Health Services**
Debra Mooney, Environmental Public
Health Advisor, Alberta Health

11:00 - 11:20am **Policies, Programs and Services**
Jillian Cormier, Coordinator, Water &
Wastewater Services, AUMA/AMDC

11:20 – 11:40am **High Tech and Efficiency in a Northern
Rural Setting**
Brent Schapansky, Utilities Coordinator,
Northern Sunrise County & NEW Water
Ltd.

11:40 – 12:00pm **Pulling together... What the
Consultants See**
Darwin Durnie, Stantec Consulting Ltd;
Past President CPWA

12:00 - 1:30 pm **LUNCH**

1:30 - 2:45 pm **AWWOA ANNUAL GENERAL MEETING
- Summit Room**

AWWOA Door Prize Draws - Three
Major Prizes – Must be in attendance to
win.

2:45 – 3:00 pm **COFFEE – Alpine Meadows**

WEDNESDAY - March 16, 2016

AFTERNOON SESSION "A" Castle Room

Session Moderator – Bert E. Miller

3:00 – 3:45 pm **Methods for the Determination of Total Coliforms, E.Coli or Fecal Coliforms for Drinking Water and Wastewater:** Gil Dichter, IDEXX Laboratories

3:45 - 4:15 pm **Cleaning of Reverse Osmosis Elements:** Mazen Ellabban, Professional Water Technologies

4:15 – 4:45 pm **Town of Devon WWTP Upgrades:** Kristi Beckman and David Lycon, Stantec and Paresh Dhariya, Town of Devon

AFTERNOON SESSION "B" Assiniboine Room

Session Moderator – Gerald Neufeld

3:00 – 3:45 pm **Standard Quartz UV VS. Non-contact UV for WWTP Applications – overview of the maintenance, performance, and energy costs comparing the technologies:** Gary Jeral, Enaqua & Johlin Measurement Ltd.

3:45 - 4:15 pm **Lake Turnover: Causes, Effects and Treatment:** Michelle Leslie, City of Wetaskiwin

4:15 – 4:45 pm **Powerful Water Management Data Tools for Operations and Service:** Matt Ferguson, Sensus / KTI Ltd.

AFTERNOON SESSION "C" Summit Room

Session Moderator – Quentin Sryda

3:00 – 3:45 pm **Project Management Principles:** Chris Monson and Doug Simpson, MHPM

3:45 - 4:15 pm **Corrosion Mitigation:** Gareth Price, Galaxy Plastics

4:15 – 4:45 pm **Performance of Screen Technologies in Wastewater:** Siham El Murr and Aurelien Pauleat, VEOLIA Water Technologies Canada

CASINO

7:30 – 10:30 pm

Social Event - Sponsored by Wolseley

Main Ballroom, Banff Park Lodge
Games and Prizes

Name Tag is required for admission

THURSDAY - March 17, 2016

8:30 – 10:15 am **Registration** – Hotel Lobby

MORNING SESSION “A” **Castle Room**

Session Moderator – Bert E. Miller

9:00 – 9:30 am **Alarm Management for a Better Operating Environment and Improving Situational Awareness:** Adam McCardle, Eramosa Engineering Inc.

9:30 – 10:15 am **Managing Maintenance for Edmonton’s Mechanical Wastewater Facilities:** Sid Lodewyk and Denis Hillier, City of Edmonton

10:15 - 10:45 am **COFFEE - Alpine Meadows**

10:45 – 11:15 am **Northern Collaboration – Water North Coalition:** Bob Marshall, Tracey Anderson, and Kim Pinnock, Water North Coalition

11:15 - 12:00 pm **Challenges of a GWUDI System Design; Horse Lake First Nation WTP:** Nathan Miller and Jackie Mykytiuk, M2 Engineering

12:00 - 1:30 pm **LUNCH**

MORNING SESSION “B” **Assiniboine Room**

Session Moderator – Wade Bell

9:00 - 9:30 am **Commissioning – Is Finishing the Race all That Really Matters?:** Edward Vedlman and Zane Spencer, MPE Engineering Ltd.

9:30 - 10:15 am **An Operators Journey: The Challenges of Transitioning from Commissioning to Full-Time Operations at the New Drayton Valley WTP:** Bill Adam, Town of Drayton Valley and Jason Kopan, ISL Engineering and Land Services

10:15 - 10:45 am **COFFEE - Alpine Meadows**

10:45 – 11:15 am **Calcium Hypochlorite Tablet Systems – Fact or Fiction:** Michael Leggett, Axiall Corporation

11:15 – 12:00 pm **Filtration and Separation Using Automatic Self-Cleaning Filters:** Anita Gupta, John Brooks Company Limited

12:00 - 1:30 pm **LUNCH**

THURSDAY - March 17, 2016

MORNING SESSION "C" Summit Room

Session Moderator – Gerry Gusdal

9:00 - 9:30 am **ICI Meter Maintenance Planning:** Alex McGregor, Neptune Technology Group

9:30 - 10:15 am **Upgrading Lagoons for Phosphorus Removal: Sundridge, Ontario's Case Study:** Martin Hildebrand, Nelson Environmental Inc.

10:15 - 10:45 am **COFFEE - Alpine Meadows**

10:45 – 11:15 am **Struvite Mitigation for a Biological Nutrient Removal Facility:** Matthew MacPhail, Stantec Consulting Ltd.

11:15 – 12:00 pm **Level Measurement in the Water and Wastewater Industry:** Don Ford, Spartan Controls

12:00 - 1:30 pm **LUNCH**

AFTERNOON SESSION "A" Castle Room

Session Moderator – Gerald Neufeld

1:30 - 2:00 pm **Taking on Trash: Equipping Wastewater Professionals to Eliminate the Wipes Nightmare:** Troy Heimerl, JWC Environmental

2:00 - 2:45 pm **O&M Considerations for Pressure Sewer Systems:** Keith J McHale, Environment One Corporation

2:45 – 3:00 pm **COFFEE - Alpine Meadows**

3:00 – 3:30 pm **Implementing an Oil and Grit Separator Maintenance Program:** Graham Fuga, Lafarge Canada Inc.

3:30 – 4:00 pm **The Critical Water Plant Story – Asset Criticality Identification:** Sharmila Acharya and Kendal Martens, City of Calgary

THURSDAY - March 17, 2016

AFTERNOON SESSION "B" Assiniboine Room

Session Moderator – Scott Chant

- 1:30 - 2:00 pm** **Planning for Climate Change in Sanitary Sewer Design:** Johnny Ke, Stantec Inc.
- 2:00 – 2:45 pm** **Improved Jar Testing Optimization with Organics Monitoring:** Amanda Scott and Dondra Biller, GE Analytical Instruments
- 2:45 – 3:00 pm** **COFFEE - Alpine Meadows**
- 3:00 – 3:30 pm** **Nanton Wastewater Treatment Plant – Just When you Thought Nothing Else Could Go Wrong...:** Mark Black, ISL Engineering and Land Services Ltd., and Kevin Miller, Town of Nanton
- 3:30 – 4:00 pm** **Identifying Sources of Toxicity in Treated Wastewater Samples Submitted for Whole Effluent Testing in Compliance with the Wastewater Systems Effluent Regulations:** Dr. Howard Bailey and Jacklyn Poole, Nautilus Environmental
- 6:00 pm** **RECEPTION - Alpine Meadows**
- 7:00 pm** **AWWOA Annual Banquet and Awards Presentations – Tickets Required**
- 2015 NAIT Achievement Awards
- Steve Blonsky Honorary Life Membership Award
- 2016 Ron Bayne Service Award
- 2015 Gerald Samuel Operator of the Year Award
- Past Chair Award
- 9:00 pm** **ENTERTAINMENT**
Comedian, Gery Schubert

FRIDAY, March 18, 2016

MORNING WORKSHOP SESSION - Assiniboine/Castle Room

Attendance required for 0.3 CEUs

Moderator – Dan Rites, AWWOA

8:30 – 11:30 am Communicating Water's Value

- The Unfiltered Truth:
Communicating Water's Value
- Media Waste Management:
Handling the Tough Questions
- Rogue Warriors of Operations:
Avoiding the Nut Island Effect

Presented by: Melanie K. Goetz

11:30 am

CLOSING REMARKS

Nancy McAteer, 2015 – 2016 Chair
Alberta Water & Wastewater Operators
Association

*The Alberta Water & Wastewater
Operators Association
wishes to thank*

Alberta Municipal Services

Aquatera

Biomaxx Wastewater Solutions Inc.

Edmonton Waste Management

Centre of Excellence

EPCOR

Eramosa Engineering Inc.

Georg Fischer

Mequipco Ltd.

MPE Engineering Ltd.

Municipal Service & Supplies Association

Stantec

TerraBurst

Wolseley Canada Waterworks

for their generous support

**PAST RECIPIENTS OF THE
RON BAYNE SERVICE AWARD**

| | | | |
|------|---------------------|------|----------------------|
| 1985 | Gerald Samuel | 2001 | Harold Lewis |
| 1986 | Ron Bayne | 2002 | Kathy Abramowski |
| 1987 | Herb Zinger | 2003 | Mike Pelletier |
| 1988 | Ken Elstone | 2004 | Doug Thorson |
| 1989 | Award not presented | 2005 | Frank Wetsch |
| 1990 | Del Morrison | 2006 | Garth Carl |
| 1991 | Award not presented | 2007 | Terry Chapman |
| 1992 | Louis Hedberg | 2008 | Carl McDonnell |
| 1993 | Steve Blonsky | 2009 | Glenda Donovan-Malik |
| 1994 | Dalton Stafford | 2010 | Kim Fath |
| 1995 | Bob Vatcher | 2011 | Award not presented |
| 1996 | R. Lynne Coulter | 2012 | Nancy McAteer |
| 1997 | Bert Miller | 2013 | K.C. Stone |
| 1998 | Ed Westerbeek | 2014 | Allan Kendrick |
| 1999 | John Barrett | 2015 | Cathie Monson |
| 2000 | Andy Bebbington | | |

**PAST RECIPIENTS OF THE
GERALD SAMUEL
OPERATOR OF THE YEAR AWARD**

| | | | |
|------|-------------------------------------|------|--|
| 1984 | Steve Blonsky High Prairie | 2000 | Karen Waldick Linden |
| 1985 | Denis R. Gray Nanton | 2001 | Bob Einarson Rocky Mountain House |
| 1986 | Lyman "Sonny Crowther Whitecourt | 2002 | Harold Lewis Vulcan |
| 1987 | Barry Parker Swan Hills | 2003 | Randy Reaman Red Deer |
| 1988 | Burton Hingley Lomond | 2004 | Gordon Miller Rocky View Water Coop |
| 1989 | Albert Bourlon Valleyview | 2005 | Malcolm A. McKinnon Standard |
| 1990 | John Thoma Fairview | 2006 | Gordon Fournier Drumheller |
| 1991 | Guy Jette Fort McMurray | 2007 | Kerry Clark EPCOR Edmonton |
| 1992 | Ken Osepchuk Smoky Lake | 2008 | Keith Straub High Level |
| 1993 | Ernie Formanek St. Paul | 2009 | Randy Cyba Vegreville |
| 1994 | Brent Applegate Wandering River | 2010 | John Girhiny EPCOR Edmonton |
| 1995 | John White Granum | 2011 | Dwayne Cikaluk ACRWC |
| 1996 | Bob Quinn Calgary | 2012 | Doug Renwick Aquaterra |
| 1997 | Andy Maguire Edmonton | 2013 | Steve Solic Taber |
| 1998 | Barry Brookes Red Deer | 2014 | Curtis Schultz Aquaterra |
| 1999 | Bruce MacLennan Rosemary | | |

**PAST RECIPIENTS
OF THE STEVE BLONSKY
HONORARY LIFE MEMBERSHIP**

| | | | |
|------|--------------------------------|------|---------------------------------|
| 2001 | Steve Blonsky | 2011 | Glenda Donovan-Malik |
| 2002 | Herb Zinger | 2012 | Andrew T. Maguire |
| 2007 | Doug Thorson & Harold Lewis | 2013 | Not Awarded |
| 2008 | John Barrett | 2014 | Del Morrison & Gerald Samuel |
| 2009 | Norm Grexton | 2015 | Not Awarded |
| 2010 | Gerald Will | | |

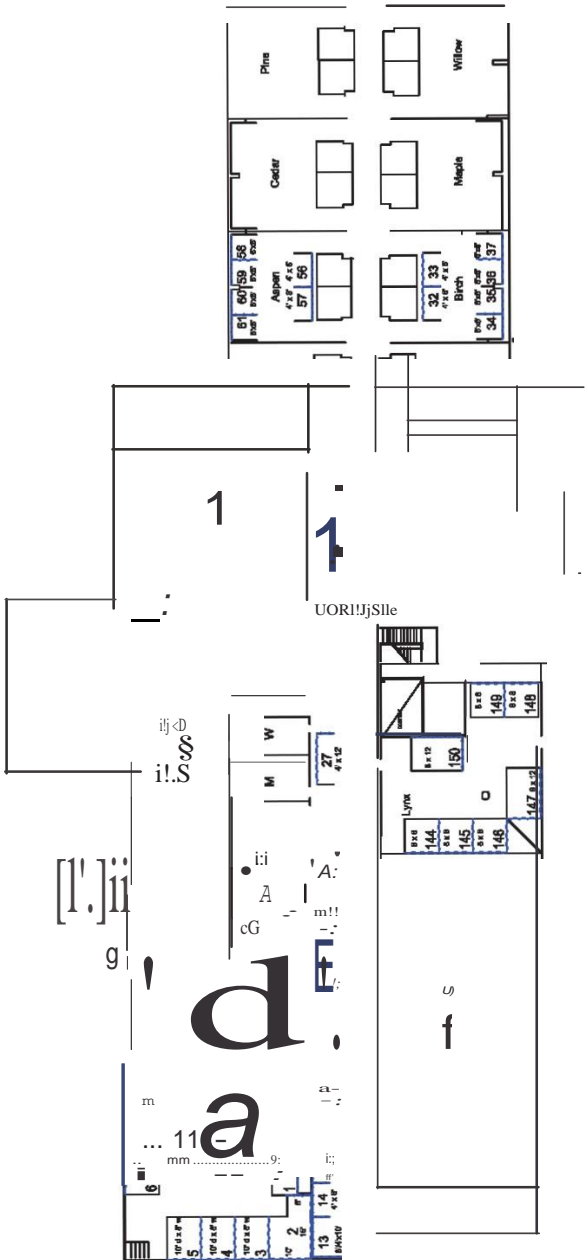
List of Displayers

| | | | |
|--------|--|-----|--------------------------------------|
| Willow | AWWOA | 37 | Canada Colors and Chemicals |
| Pine | Silent Auction | | |
| Maple | BioMaxx WasteWater Solutions | 56 | Advanced Water Technologies |
| Cedar | New Line Trenchless Technologies | 57 | J.C. Industries |
| 1 | Evoqua Water Technologies | 58 | Aqua Clear Environmental |
| 2 | ATS Traffic Group | 59 | AMHSA |
| 3 | A. H. McElroy Sales & Service (Canada) | 60 | North Fringe Industrial Technologies |
| 4 | Urecon Pre-Insulated Pipe | 61 | North Fringe Industrial Technologies |
| 5 | Wolseley Waterworks Group | 62 | Fabco Plastics |
| 6 | W.R. Meadows of Western Canada | 63 | Mueller Canada |
| 7 | Mequipco Ltd. | 64 | Capital H2O Systems |
| 8 | JWC Environmental | 65 | Georg Fischer |
| 9 | Advance Diving Projects | 66 | Klearwater Equipment & Technologies |
| 10 | Trenchless West | 67 | NAIT |
| 11 | United Rentals Trench Safety | 68 | Robar Industries |
| 12 | United Rentals Pump Solutions | 69 | Westech Industrial |
| 13 | McKay Water Works Supply | 70 | Nelson Environmental |
| 14 | Crane Pumps & Systems | 71 | Anthratech Western |
| 15 | Clear Water Controls | 72 | Can-Am Instruments |
| 16 | ClearTech Industries | 73 | EMCO Waterworks |
| 17 | Simark Controls | 74 | Johlin Measurement |
| 18 | Top Shot Concrete | 75 | Galaxy Plastics |
| 19 | Cam-Trac Inspection Services | 76 | Arndt Motor and Pump Service |
| 20 | CIF Composites | 77 | Kuma Water |
| 21 | CCD Technologies | 78 | Lafarge |
| 22 | Cubex | 79 | Mountainview Systems |
| 23 | ISCO | 80 | Wajax Industrial Components |
| 24 | Martech | 81 | Vanko Analytical |
| 25 | Hertz Service Pump & Compressor | 82 | Netzsch Canada |
| 26 | Carbon Controls | 83 | Cues Canada |
| 27 | Lambourne Environmental | 84 | Weidmuller |
| 28 | Environment & Parks | 85 | Insituform Technologies |
| 29 | Environment & Parks | 86 | DWG Process Supply |
| 30 | Corix Water Products | 87 | VWR International |
| 31 | WJF Instrumentation | 88 | Spartan Controls |
| 32 | Walker Environmental | 89 | Cambridge Brass |
| 33 | Contact Automation | 90A | Norwood Waterworks |
| 34 | Norm Grexton | 90B | Brenntag Canada |
| 35 | Xceed Machine Works | 91 | John Brooks Company |
| 36 | Alberta Municipal Services Corporation | 92 | Kuperle/General Wire Spring |

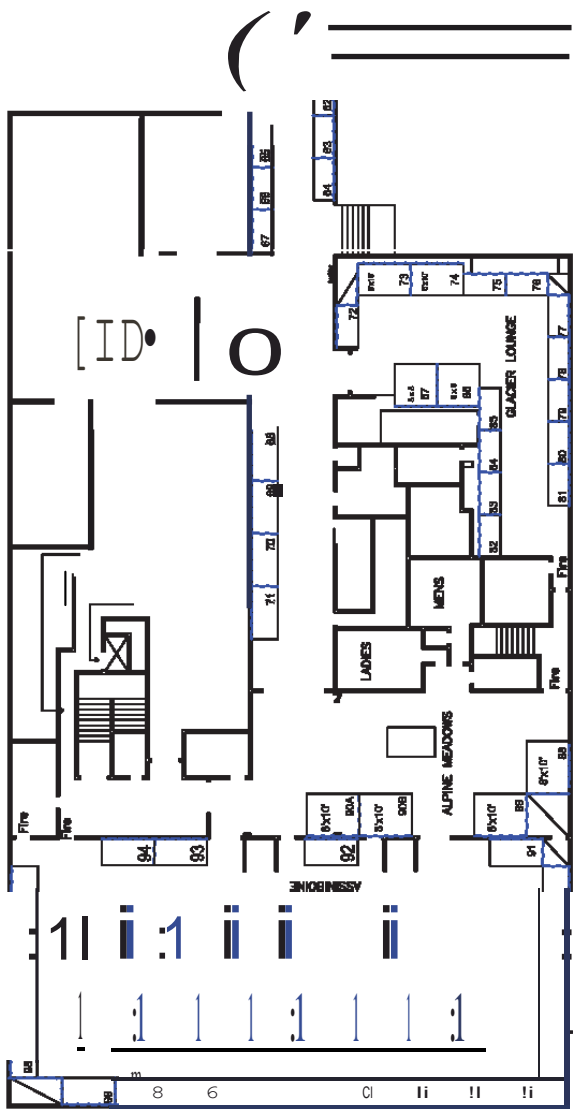
List of Displayers

| | | | |
|-----|-------------------------------------|-----|----------------------------------|
| 93 | Canada Pipeline Accessories | 132 | Star Pipe |
| 94 | Proline PSI | 133 | CD Nova |
| 95 | IVIS | 134 | Endress + Hauser |
| 96 | Target Products | 135 | StonCor Group |
| 97 | Summit Valve and Controls | 136 | Canadian Dewatering |
| 98 | Hayward Gordon | 137 | Metercor |
| 99 | Canadian Leak Detection | 138 | USC Utility Supply |
| 100 | Taber Solids Control | 139 | Donison & Associates |
| 101 | Wachs Canada | 140 | SaskAlta Environmental Solutions |
| 102 | Univar Canada | 141 | MPE Engineering |
| 103 | HACH | 142 | Aquatera Utilities |
| 104 | HACH | 143 | Telematic Controls |
| 105 | Veolia Water | 144 | Accu-Flo Meter Service |
| 106 | Central Water | 145 | Atek |
| 107 | Ramtech Environmental Products | 146 | Johnson Insurance |
| 108 | Liberty Pumps | 147 | Victaulic Company of Canada |
| 109 | Denso North America | 148 | Superior Equipment |
| 110 | RIDGID | 149 | SHAC Environmental Products |
| 111 | Ford Meter Box | 150 | Flowpoint |
| 112 | Xylem | | |
| 113 | AVK Valves & Hydrants | | |
| 114 | National Process Equipment (Natpro) | | |
| 115 | Acti-Zyme Products | | |
| 116 | Sanithern a Clean Harbors Company | | |
| 117 | Chamco Industries | | |
| 118 | Engineered Pump Systems | | |
| 119 | N.S. Pawliuk & Son Contracting | | |
| 120 | TDH Fluid Systems | | |
| 121 | Frontier Waterworks & Pump Supply | | |
| 122 | BSEI | | |
| 123 | Hetek Solutions | | |
| 124 | Kemira | | |
| 125 | ISL Engineering | | |
| 126 | Sii 360 | | |
| 127 | Westron Rotating Solutions | | |
| 128 | Aquatech Diving Services | | |
| 129 | Safesidewalks Canada | | |
| 130 | LineStar/ Vivax-Metrotech | | |
| 131 | LineStar/ Vivax-Metrotech | | |

Banff Park Lodge Main Level



Banff Park Lodge Upper Level





ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

41st Annual Operators Seminar

Sponsored by:



FUND RAISING EVENTS

- Two **50/50** events, Monday and Tuesday. Tickets will be sold by the Charitable Donations Committee.
- **Silent Auction**, In the Pine Room on:
Monday: 3:00 - 9:00 pm
Tuesday: 10:00 am to 5:00 pm.

All funds raised, support the Water School and Water for People Canada.