

Clean and Safe Drinking Water Workshop - Summary



**GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR**

Department of Environment and Conservation

Gander
March 11-13, 2008

Introductions



- **Welcome and Opening Remarks**
 - ◆ Claude Elliott, Mayor of Gander
 - ★ “Long way to go to get safe and clean drinking water”
 - ◆ Deneen Spracklin and Ervin McCurdy
 - ★ Introduction of staff
 - ★ OETC program outline for 2008₂

Brian Jobb

MS Filter Inc. and Walkerton Clean Water Centre

- **Special Considerations for Small Drinking Water Systems**

- ◆ Need to follow DWQ guidelines
- ◆ Life Cycle Cost
- ◆ Disinfection By-Products
- ◆ Water treatment types suitable for small systems



Joan Parsons and Monica Pittman

Town of Parson's Pond and Town of St. Paul's

■ Using a Regional Operator



- ◆ Sharing Resources
- ◆ Management
- ◆ Vehicles and Facilities
- ◆ Funding
- ◆ Benefits

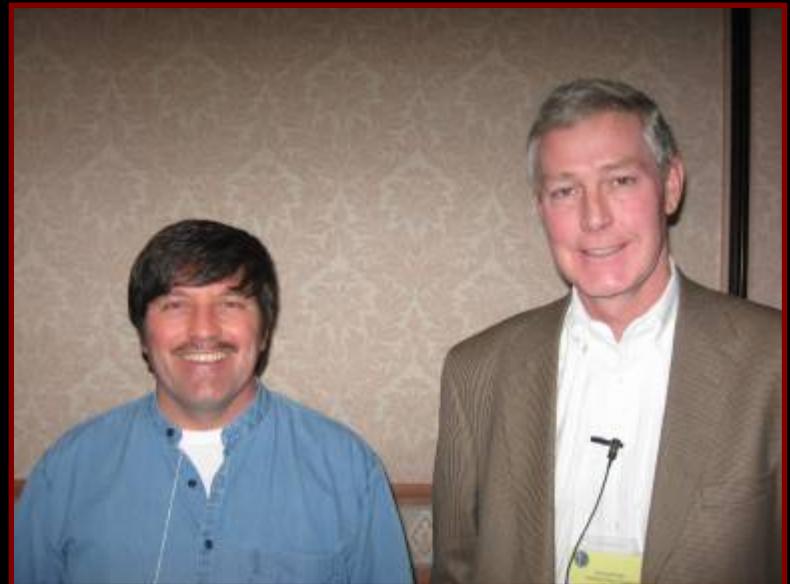
Steven G Weller, P.Eng

Jeff Rice



■ MIOX

- ◆ $\text{NaCl} + \text{H}_2\text{O} \rightarrow \text{NaOCl} + 2\text{H}$
- ◆ Benefits
 - ★ Regulatory Ease
 - ★ Ease of Maintenance
 - ★ Cost-Effective
- ◆ ON-site Mixed Oxidants
 - ★ Operational Benefits



Jason Phillips



- **Valve Exercising for the City of St. John's**
 - ◆ Why should we exercise valves
 - ◆ Benefits / Problems
 - ◆ Program Components
 - ★ Locate Valves
 - ★ Exercise Valves
 - ★ Valve Records
 - ★ Valve Maintenance

Maynard King



- **Operation and Maintenance of Mechanical Filters**
 - ◆ Filtration Terms
 - ◆ Filter Types and Applications
 - ◆ Typical Back Flushing Process
 - ◆ Maintenance
 - ◆ Troubleshooting

Hon. Charlene Johnson

Minister of Environment and Conservation

- **Greetings from Government of Newfoundland and Labrador**
 - ◆ Welcome the speakers and delegates to the 6th annual workshop
 - ◆ Government's role in drinking water safety
 - ◆ Multi-barrier approach and priority for government.
 - ◆ Operator of the Year Award



Dr. Guy Felio, P Eng



- **Managing Aging Infrastructure**
 - ◆ Issues with Aging Infrastructure
 - ★ Staff
 - ◆ Asset Management
 - ◆ Levels of Service
 - ◆ Key Steps
 - ◆ Skyrocketing costs for not doing maintenance
 - ◆ Template

Fred Swift and Danika Drover



- **Safety Practices for Trenching and Excavation and Confined Space Entry**
 - ◆ Mandate of OHS
 - ◆ Responsibility areas
 - ◆ Legislations
 - ◆ What Workers Must Know
 - ◆ Examples from trenching, electrical, asbestos, confined spaces, etc.

Mike Pinsent

Town of Grand Falls -
Windsor



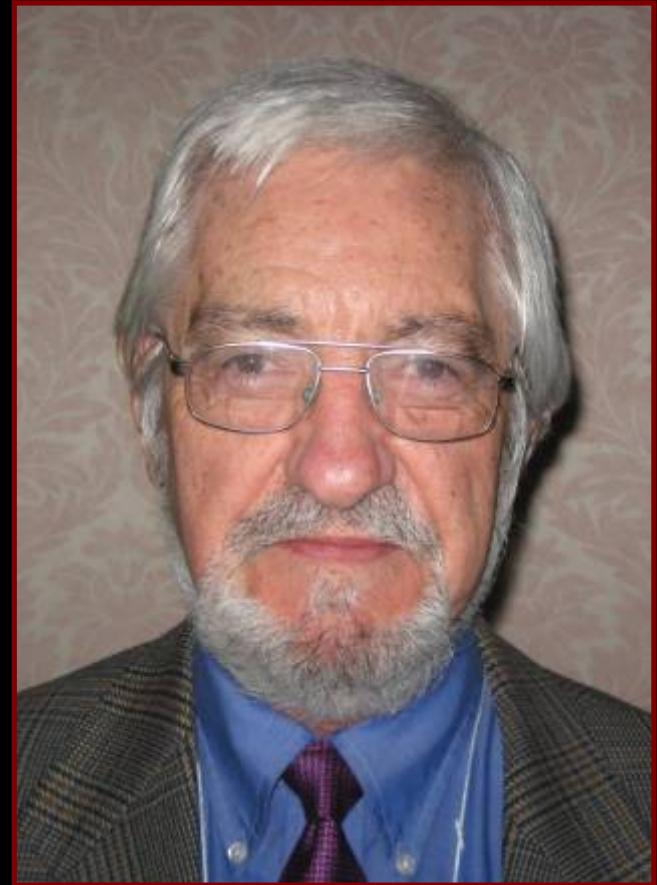
- **Exploits Regional Services Board “A Case Study”**
 - ◆ History
 - ◆ Infrastructure
 - ◆ Board Structure
 - ◆ Community Based Pros/Cons

Brian Pett



■ Analyzing Analyzers (Chlorine Residual Analyzers)

- ◆ Need for continuous monitoring
- ◆ Methods
 - ★ Manual
 - ★ Instrumentation
- ◆ Types and added features
- ◆ Tips for buying and installation



Robert Gillis, P.Eng



- **UV System Maintenance and Troubleshooting**
 - ◆ Introduction to UV Light
 - ◆ UV Dose
 - ◆ Design Criteria
 - ◆ Key Components
 - ◆ Operation
 - ◆ Maintenance
 - ◆ Troubleshooting



David Moulton, P. Eng



- **Chemically Assisted Flushing in the Town of Gander (BioPurge)**
 - ◆ New Water Treatment Plant
 - ◆ What is Bio-Film?
 - ◆ Treatment Process
 - ◆ Flushing Process
 - ◆ DBP Reduction
 - ◆ Alternatives

Paula Dawe, P. Eng



Water Resources
Management Division

- **Potable Water Dispensing Units**
 - ◆ Comparison of WTPs and PWDUs
 - ◆ Jurisdictions that use PWDUs
 - ◆ Advantages of PWDUs
 - ◆ Justification and Trade-offs of using PWDUs
 - ◆ Examples of PWDUs in NFLD
 - ◆ PWDUs as a sustainable option for DWQ management of small systems

Congratulations to the Operator of the Year and to the Operator of the year nominees.



Thank you!

Exhibitors:

Atlantic Purification Systems
Atlantic Technical Services
CB Tubecraft
Dyna-Pro Environmental
EMCO Corp.
E.N.G. Environmental Technologies
Fisher Scientific
FloTech Enterprises
ITT Flygt
Kemtag Enterprises
King's Enterprises
MS Filter
Omnitech Inc.
Pall Water Processing
RealTech
Sansom Equipment
Walkerton Clean Water Centre



Thank you!

Support: Department of Municipal Affairs

Thank you!

Organizers	Deneen Spracklin, Ervin McCurdy
Moderators	Ervin McCurdy, Gerry Lahey, Jim Pollett, Darren Patey and Deneen Spracklin
Audio, Visual and IT	Paul Neary, Leona Hyde
Photographs	Michael Colbert
Registration Desk	Annette Tobin, Paula Dawe and Nelson Tobin
Presenter Assistants (Travel Claims)	Christa Ramsey, Chris Blanchard, Darren Patey, Gerry Lahey, and Jim Pollett
Trade Show and Set-Up	Gerry Lahey, Jim Pollett, Darren Patey, Nelson Tobin, Floyd Barnes, Steve Barnable, Michael Colbert, Chris Blanchard, Christa Ramsey, Annette Tobin, Paula Dawe, Ervin McCurdy, and Deneen Spracklin

A very special thank you!

**Accommodations
Facilitators**

**Darren Patey
Jim Pollett**

Thank you!

Participants



- Please provide your comments to us on any matter you wish to mention about this workshop so we can address those matters in the future.
- If you would like to have a colour version of these presentations, please check our web site and we will have them there for you to download.