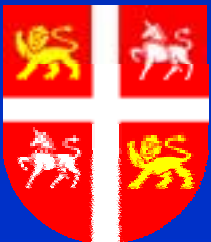


Clean and Safe Drinking Water Workshop - Summary



**GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR**
Department of Environment

Gander, March 12th,
13th & 14th, 2002

Introduction

- Welcoming remarks
 - ◆ Claude Elliott, Mayor of Gander
 - ◆ Walwin Blackmore, Mayor of Grand Falls – Windsor and President NLFM
 - ◆ Ken Dominie, Assistant Deputy Minister of Environment



Martin Gravel, P.Eng

CH2M HILL Canada

- Transitioning from Conventional Treatment to Integrated Treatment
- Membrane Filtration Application from Inside to Outside
 - ◆ *“Old Friend” – Traditional water treatment, review of the past and look at new trends. The “weakest link”*
 - ◆ *Membrane technology is growing rapidly due to smaller, cheaper and better systems*

Amir Salama, P.Eng

OZOMAX Ltd.

- Ozone Technology and Applications
 - ◆ Ozone is an alternate form of disinfection. It is a powerful chemical and does not create some of the DBP side effects.
 - ◆ How ozone is produced, applied in water systems and comparative benefits.

Bob Helleur, Ph. D.

Memorial University Newfoundland

- Chemistry of Drinking Water
Purification: a Balancing Act
 - ◆ Various alternates have benefits and advantages over others. Sometimes those alternatives have to be rationalized for example in “cost vs acceptable water quality”

Jackie Leinburger, P.Eng

Trojan Technologies Inc.

- Disinfection of Drinking Water with Ultraviolet Light
 - ◆ UV light theory and how it deactivates harmful pathogens.
 - ◆ Very effective for *Cryptosporidium*
 - ◆ High relative cost effectiveness for small systems

Walter Schajnoha

ProMinant Fluid Controls

- Chloramination in Drinking Water Systems
 - ◆ Interaction of Chlorine + Ammonia
 - ◆ Low DBPs, good residual applications
- Chlorine Dioxide in Drinking Water Systems
 - ◆ Very effective disinfectant
 - ◆ Applications can be sensitive to operating parameters and DBPs

Derek Proulx, P.Eng

US Filter, Wallace & Tiernan
Products

- Chlorination Equipment and Accessories
 - ◆ How to get chlorine into the water
 - ◆ How to measure it
 - ◆ How to optimize the application

Cyril McCarthy, P.Eng

Department of Municipal and Provincial Affairs

- "Improving Operation and Maintenance of Water and Sewer Systems - Programs Available from the Department of Municipal and Provincial Affairs
 - ◆ Operator training and certification?
 - ◆ Review of existing MPA programs
 - ★ Municipal Capital Works
 - ★ Disinfection Assistance Program
 - ★ Regional Cooperative Initiative

Graham Gagnon, Ph.D.

Dalhousie University

- Overview and Framework for Selection of Water Treatment Process
 - ◆ Objectives of water treatment
 - ◆ Physical treatment methods
 - ◆ Disinfection
 - ◆ Distributions systems

Willard D'Eon, P.Eng

CBCL Limited, Halifax

- Point of Entry and Point of Use Filters
 - ◆ What filters and devices are recommended?
 - ◆ Standards – NSF, CSA
 - ◆ Pros and cons of various types
 - ◆ Solutions for various problems

Thank you!

Exhibitors:

Atlantic Technical Services Ltd.

Brimac Carbon/Jade Water Treatment

Flotech Enterprises Ltd.

Pall (Canada) Ltd.

K & D Pratt/Tubecraft

Kean's Pump Shop Ltd.

MGI Limited

Sansom Equipment Ltd.

Western Pump Services



Thank you!

Participants:



Thank you!

- 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