

Pumps & Pumping Station Design

In keeping with the Water Environment Association of Ontario's (WEAO) New Professionals (NP) commitment to continuing education through technical development, the WEAO NP Committee is pleased to present the latest technical seminar on the topic of "Pumps and Pumping Station Design". This seminar will focus on the fundamental theory to practical applications of pumps and pumping station designs for the wastewater treatment industry.

Speakers for this event include Richard Miller of S.A. Armstrong Ltd. (www.armstrongpumps.com) and Frank Ferrie of ITT Flygt Inc. (www.ittflygt.com). Their respective topics include the following:

SEMINAR TOPICS INCLUDE:

Frank Ferrie, *ITT Flygt Inc.:*

PUMP FUNDAMENTALS

- Basic Hydraulics
- Pump Selection
- Duty Points and System Curves
- Pumping Different Types of Sludge

PUMP CONTROLS & PROTECTION

- Variable Speed Applications
- Pump Maintenance
- Pumping Station Monitoring

Richard Miller, *S.A. Armstrong Ltd.:*

- Sewage pumping station layout
- Basic station and forcemain design
- System head calculations
- Flush systems
- Air entrainment, cavitation, waterhammer
- Other common problems
- Handling varying flowrates

The WEAO NP Committee has been created to represent those WEAO members with ten (10) years or less of experience in the wastewater industry, or less than 35 years of age. Our primary goal is to recruit, develop programs for, and encourage participation of New Professionals in WEAO activities.

Please join us for this opportunity for networking, social interaction and technical development on [Thursday, December 9th from 6:00 to 8:00 pm](#). There will be an initial 15-minute sign-in period followed by the presentations. Please RSVP by contacting [Vanessa Chau](#) (Technical Seminar Co-Chair) at vanessac@kmk.ca no later than Thursday December 2nd.

The seminar will be held at the Ontario Ministry of the Environment (MOE) Laboratories located at [125 Resources Road, Etobicoke, ON](#), as indicated in the map below. Please note there is no charge for this event, other than parking. Dinner will be included as part of this event on behalf of the presenters.

