

WATER & WASTEWATER OPERATORS  
TRAINING PROGRAM  
2006-2007

INTRODUCTION

Operator training is a vital component to ensure optimum operation of facilities and to ensure protection of public health and the environment. The Alberta Water & Wastewater Operators Association administers a number of training courses for MUNICIPAL WATER and WASTEWATER FACILITY OPERATORS. Alberta Environment recognizes all of these courses and has awarded Continuing Education Units (CEUs) to them.

These courses are intended to complement those presented by other agencies and institutions. In some cases, they may bridge the gap between formal, full-time training and on-the-job instruction.

The information included in this booklet lists courses in three categories.

**1. CONTINUING EDUCATION COURSES**

- intended as ongoing and upgrading training, these 1 to 5 day short courses are for new or long term operators in the field

**2. CERTIFICATION EXAM PREPARATION COURSES**

- intended as preparation/study courses for the Alberta Environment Operator Certification Exams or to provide operations information
- these courses vary in length from 2 to 4 days

**3. CORRESPONDENCE and HOME STUDY COURSES**

- useful for those wishing to study at home
- correspondence courses consist of mail-in lessons and reference manuals and a locally supervised course completion exam is conducted, VHS tapes or DVD's are included but must be returned
- home study courses are to be completed and self-marked and a locally supervised course completion exam is conducted. All home study material may be kept
- students have one year from receipt of materials to complete these courses

In addition to the above courses, and in cooperation with Alberta Environment, the AWWOA offers Entry Level Training (ELT) courses for operators. Please see specific information on Entry Level Training in this brochure.

For all Continuing Education and Certification Preparation classroom courses, students are responsible for their own accommodation and meals. Courses are normally held in hotel meeting rooms and registered students will be advised of the location. NO WALK-IN/ON-SITE REGISTRATIONS will be allowed due to limited space and instructional material. The "classroom" course program is offered annually from October to June and registration is held from September 1/06 through to April 30/07.

**PLEASE NOTE that REGISTRATION for the 2007 BANFF OPERATORS SEMINAR will also begin on September 1/06. Registrations will be confirmed by return fax for ALL courses & the Operators Seminar.**

Operators may register for correspondence and home study courses from  
September 1/06 through to April 30/07.

For those registered in a correspondence course, all lessons must be submitted for marking and the final AWWOA course exam written within the **ONE YEAR** deadline.

For those taking a home study course, all applicants must notify the registrar to receive the final AWWOA course completion exam and have it written by the **ONE YEAR** deadline. Anyone who does not complete the correspondence or home study course within this one year time frame must re-register, re-pay and re-take the course.

Please note that the pass mark on all AWWOA course completion exams is **70%**. Anyone achieving between 60-69% may re-write the final course exam once. Anyone achieving less than 60% must re-register, re-pay and re-take the course.

The courses listed in this program are co-sponsored by the Alberta Water and Wastewater Operators Association, the Western Canada Water & Wastewater Association (WCWWA) and Alberta Environment.

**PLEASE NOTE: The AWWOA OFFICE and the Executive Director have NEW FAX and NEW REGISTRATION FAX NUMBERS AND A NEW REGISTRATION PHONE NUMBER**

To register for courses, please complete the application form in this booklet and  
**FAX IT to (780) 454-7748.**

To contact the AWWOA Office,  
please call the NEW PHONE NUMBER at  
**TOLL FREE; 1-877-454-7745 or local (780) 454-7745**

To send a fax to the Executive Director, please fax  
**(780) 451-6451**

The Banff Operators Seminar has a special registration form that has also been included in this booklet and may be **FAXED IN to (780) 454-7748** at any time up to **March 5, 2007** at which point pre-registration for the 2007 Banff Seminar will close. Applications received after that date will require on-site registration in Banff and payment must then be made by cash or credit card.

**Please note that the Banff Operators Seminar has new hours and some exciting enhancements-please see the information later in this brochure!**

Please indicate method of payment on the each registration application – VISA, MasterCard, purchase orders or cheques are accepted. As space is limited in some courses, all applications will be processed on a “first received” basis.

**REGISTRATION FEES are PAYABLE ON APPLICATION,  
PRIOR to the COURSE and UPON RECEIPT of an AWWOA INVOICE.**

Separate application forms (or copies of the forms) should be used for each person registering. Cheques should be made payable to the Alberta Water & Wastewater Operators Association (AWWOA). Once an application has been received for a course or the Banff Operators Seminar, the applicant will be contacted by return fax or e-mail to confirm registration – indicate which contact method is preferable on the form. If applicable, further instructions and pre-course material will be forwarded to registrants. Should the minimum enrollment not be reached at least 30 days prior to a course, it will be cancelled. All fees for cancelled courses will be refunded.

Refund Policy; A service charge of \$50 will be levied for a cancellation notice of more than 30 days. Where less than 30 days notice of cancellation is received, **NO** refund will be allowed. Substitutions of registrants will be accepted if course prerequisites are met.

PLEASE NOTE the OFFICE ADDRESS of Alberta Water & Wastewater Operators Association and the NEW PHONE and FAX NUMBERS for registrations .

You may contact the AWWOA through e-mail at [awwoa@telus.net](mailto:awwoa@telus.net) ,  
Toll free phone at **1-877-454-7745**, local phone at **(780) 454-7745**  
**The new registration fax is (780) 454-7748.**

The office address is

**Alberta Water & Wastewater Operators Association  
11810 Kingsway Avenue  
Edmonton, Alberta T5G 0X5**

**PLEASE ENSURE that YOUR ACCOUNTING DEPARTMENT HAS THIS ADDRESS**

For inquiries OTHER than those related to training course registrations, please contact  
the **Executive Director of Alberta Water & Wastewater Operators Association,**  
Del Morrison, at [awwoa1@telus.net](mailto:awwoa1@telus.net), via toll free at 1-877-454-7745 or fax (780) 451-6451.

**ALL APPLICANTS WILL BE NOTIFIED IF A REGISTRATION HAS BEEN  
RECEIVED for an AWWOA COURSE or the BANFF SEMINAR**

**IF YOU DO NOT RECEIVE A CONFIRMATION NOTICE,  
YOU ARE NOT REGISTERED**

**AWWOA COURSES OFFERED 2006-2007 COURSES**

<b><u>COURSE</u></b>	<b><u>LOCATION</u></b>	<b><u>DATE</u></b>
Level I Certification Preparation Course		
Part "A"	Edmonton	October 4 & 5, 2006
Part "B"	Edmonton	November 8 & 9, 2006
Level I Water Treatment/Distribution Prep. Course	Fort McMurray	October 16-19, 2006
Level III/ IV Wastewater Treatment Prep. Course	Calgary	October 30-Nov.3, 2006
Entry Level Training Course	Fort McMurray	October 25 & 26, 2006
Level II Certification Preparation Course	Edmonton	November 1 & 2, 2006
Entry Level Training Course	Calgary	November 1 & 2, 2006
Entry Level Training Course	Edmonton	November 6 & 7, 2006
Management and Supervision for Operators	Red Deer	November 27-29, 2006
New Developments in Wastewater Treatment Technology	Red Deer	November 30, 2006
New Developments in Water Treatment Technology	Red Deer	December 1, 2006
Cross Connection Control	Edmonton	December 18-22, 2006
Process Control Instrumentation Basics	Calgary	January 8 & 9, 2007
Level III/IV Water Treatment Prep. Course	Edmonton	January 8-11, 2007
Filter Surveillance Workshop	Red Deer	January 17 & 18, 2007
Level I Certification Preparation Course		
Part "A"	Calgary	January 22 & 23, 2007
Part "B"	Calgary	February 27 & 28, 2007
Entry Level Training Course	Calgary	January 24 & 25, 2007
Process Control: Analysers & Instruments	Calgary	February 5 & 6, 2007
2007 Alberta Operators Seminar	Banff	March 13-16, 2007
Level I Certification Preparation Course		
Part "A"	Edmonton	April 3 & 4, 2007
Part "B"	Edmonton	May 9 & 10, 2007
Chlorination Workshop	Red Deer	April 10-12, 2007
Entry Level Training Course	Edmonton	April 11 & 12, 2007
Level 1 Water Treatment/Distribution Prep. Course	Calgary	April 16-19, 2007
Small Water Systems Course	Red Deer	April 25, 2007
Small Wastewater Systems Course	Red Deer	April 26, 2007
Entry Level Training course	Calgary	May 2 & 3, 2007
Hydrant & Valve course	Edmonton	June 4 & 5, 2007

**PLEASE NOTE; Many of the classroom courses have limited enrollment – please register early.**

**CORRESPONDENCE and HOMESTUDY COURSES**

Water Treatment Plant Operations (WCWWA)	Correspondence	register until Apr.30/07
Practical Mathematics (WCWWA)	Correspondence	register until Apr.30/07
Level I Certification Preparation	Correspondence	register until Apr.30/07
Level II Certification Preparation	Correspondence	register until Apr.30/07
Small Water Systems or Small Wastewater Systems	Home study	register until Apr.30/07
Pumps; Theory, Operation & Maintenance	Home study	register until Apr.30/07
Rotating Biological Contactor	Home study	register until Apr.30/07

**PLEASE NOTE: It is important that course material be mailed to the most convenient address for the student- please indicate on the registration form which address is best to receive the material. Also, several of the home study and correspondence courses are in short supply. There may be a waiting period before the course material is sent.**

**CERTIFICATION EXAM SCHEDULE from ALBERTA ENVIRONMENT**

November 10, 2006	Edmonton & Calgary	application deadline is September 20,2006
March 13, 2007	Banff	application deadline is January 20, 2007
May 22, 2007	Edmonton, St. Paul	application deadline is April 10, 2007
May 23, 2007	Red Deer, Peace River	application deadline is April 10, 2007
May 24, 2007	Medicine Hat, Grande Prairie	application deadline is April 10, 2007
May 24, 2007	Lethbridge	application deadline is April 10, 2007
May 25, 2007	Calgary, Fort McMurray	application deadline is April 10, 2007

Please note that Alberta Environment is responsible for certification exams – the Alberta Water & Wastewater Operators Association provides training courses **ONLY**. Please **do not** mail or fax any applications for writing of the Alberta Environment certification exams to the AWWOA.

**PLEASE NOTE:** A change of requirements for water and wastewater treatment plant operators in Alberta came into effect on January 1, 2005. The changes were made when Alberta’s Guidelines for Water and Wastewater Operator Certification were updated in September 2004. They are part of the Government of Alberta’s continuous improvement effort to ensure that drinking water and water for the aquatic environment remains safe and sustainable. Applications for certification and information on the Alberta Environment Water and Wastewater Operator Certification Program can be found at <http://www3.gov.ab.ca/env/water/DWQ/certification.html>

For further information on certification, please contact Alberta Environment at [wasteandwater.certification@gov.ab.ca](mailto:wasteandwater.certification@gov.ab.ca) or via telephone at (780) 427-7713 or via fax; 427-5204

## CONTINUING EDUCATION COURSES

### ENTRY LEVEL TRAINING

**1.2 CEUs**

This two- day course satisfies the Alberta Environment training requirement for operators becoming certified for the first time. This training covers basic aspects of the industry - it has not been specifically developed to prepare an operator to write a certification exam. The AWWOA does offer certification preparation courses that have been specifically designed to aid in the writing of the Alberta Environment certification exams. Please see the description of these classroom and correspondence courses later in this brochure.

When applying for **certification**, please indicate registration in this course. If all the other requirements (education, experience) are met, the operator may be **conditionally approved** to write. This course **must** be successfully completed **before** an operator will be permitted to write the certification exam.

#### **PREREQUISITE;**

None required.

#### **COURSE OUTLINE;**

Legislation; role of the operator, implications of non-compliance, applicable laws, and Alberta Environment's certification requirements

Communication & Math skills; standard operating procedures, calculations, conversions, daily records

Water Treatment; equipment maintenance, drinking water processes/production, contamination risks

Wastewater Treatment; principles, stabilization ponds, mechanical plants, equipment maintenance

Safety & Security; emergency planning, hazards, safety procedures, protective equipment

Water Distribution and Wastewater Collection; systems, components, maintenance, blueprint reading

#### **COST;**

\$300 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to Alberta Water & Wastewater Operators Association

#### **DATES and LOCATION;**

October 25 & 26, 2006	Stonebridge Hotel, Fort McMurray	Reservations; 1-888-799-7663
November 1 & 2, 2006	M.A.T.C., Calgary	Recommended Hotel; Glenmore Inn
November 6 & 7, 2006	Westwood Inn, Edmonton	Reservations; 1-800-557-4767
January 24 & 25, 2007	Glenmore Inn, Calgary	Reservations; 1-800- 661-3163 (\$93 per night)
April 11 & 12, 2007	Chateau Louis, Edmonton	Reservations; (780) 452-7770
May 2 & 3, 2007	Glenmore Inn, Calgary	Reservations; 1-800- 661-3163 (\$93 per night)

No manuals will be forwarded to students in advance of this course – the instructor will provide all material on-site as well as a course completion exam. Attendance on BOTH days is required.

**Please note that NO walk in/on-site registration will be accepted.**

This three-day course focuses on the skills which operators and supervisors require to effectively manage their treatment facilities and supervise people. Specific areas covered include planning, organizing, directing and controlling. The course is designed for supervisory operators and plant managers who wish to upgrade their supervisory skills, or for those who have recently accepted the responsibilities of a supervisor.

**PREREQUISITES:**

Candidates should be employed at a municipal facility.

**COURSE OUTLINE:**

Basic concepts of management  
Personnel administration  
Budgeting  
Public relations  
Safety programs  
Emergency planning  
Reports

**COST**

\$375 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

November 27-29, 2006      Red Deer Lodge  
Red Deer                      Reservations; 1- 800-661-1657

**Please register early! If there is insufficient interest, this course may be cancelled.**

**Please note that NO walk-in or on-site registration will be accepted.**

This one-day course will highlight the new technologies available for treating municipal wastewater. Presentations will be made on a wide variety of topics highlighting technology and practices that are “current” or “emerging”.

**PREREQUISITE:**

None. Anyone interested in Wastewater treatment technology may register.

**COST**

\$175 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

PLEASE NOTE that you will receive a discount if registering for BOTH the New Developments in Water Treatment and the New Developments in Wastewater Treatment. The cost of attending ONE course is \$175 + GST, the cost of attending BOTH courses is \$330 + GST = a \$20 saving.

**DATES and LOCATION:**

November 30, 2006  
Red Deer

Red Deer Lodge  
Reservations; 1-800-661-1657

**Please register early! This course was extremely popular in previous years and space is limited!**

**Please note that NO walk-in or on-site registration will be accepted.**

This one-day course will highlight new technologies available for treating municipal water supplies. Presentations will be made on a wide variety of topics highlighting technology and practices that are “current” or “emerging”.

**PREREQUISITE:**

None. Anyone interested in Water Treatment Technology may register.

**COST**

\$175 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

PLEASE NOTE that you will receive a discount if registering for BOTH the New Developments in Water Treatment and the New Developments in Wastewater Treatment. The cost of attending ONE course is \$175 + GST, the cost of attending **BOTH** courses is \$330 + GST = \$20 saving.

**DATES and LOCATION:**

December 1, 2006  
Red Deer

Red Deer Lodge  
Reservations; 1-800- 661-1657

**Please register early! This course was extremely popular in previous years and space is limited.**

**Please note that NO walk-in or on-site registration will be accepted.**



This five-day course will cover the approved methods of protecting a potable water supply from backflow which could result in the contamination of water systems. It is held at the Northern Alberta Institute of Technology, Patricia Campus and uses NAIT instructors. Following the classroom instruction, students will be given the opportunity to take a combined written and practical exam leading to the American Water Works Association Testers Certification from the Western Canada Section of AWWA. A nominal exam fee will apply and will be collected on-site.

**PREREQUISITE:**

Candidates should be familiar with the operation of water facilities

**COURSE OUTLINE:**

The science of water  
Causes of backflow  
Approved methods of protection  
Testing of approved devices  
Local codes  
Legal aspects

**COST:**

\$700 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

December 18-22, 2006  
Edmonton

N.A.I.T. Patricia Campus, 12204 – 149 Street  
Recommended hotel: Chateau Louis Hotel, reservations; (780) 452-7770

**Early registration is a MUST! This course is limited to just 12 registrants.  
If there are not enough candidates by December 1/06,  
this course may be cancelled.**

**Please note that NO walk in/on-site registration will be accepted.**

This two-day course is intended to provide information for facility operators, supervisors, designers and engineers about how electronic and microprocessor based control systems are used to automate modern water and wastewater facilities.

The presenter is Mr. Glen Horne of Camenex Control Systems Ltd. Glen has many years of experience designing and optimizing control systems at water and wastewater facilities.

**PREREQUISITE:**

Candidates should be familiar with the operation of water and wastewater facilities

**COURSE OUTLINE:**

- Process control types
- Analog control
- Digital control
- Supervisory Control and Data Acquisition (SCADA)
- Distributed control systems
- On-Line monitoring
- Future trends and case studies

**COST:**

\$300 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association

**DATES and LOCATION:**

January 8 & 9, 2007	Glenmore Inn, Calgary (\$93 per night)
Calgary	Reservations; 1-800-661-3163

**As space and instructional material is limited, NO walk-in or on-site registrations will be accepted.**

This two-day course is intended to assist the operator with the operation and maintenance of rapid gravity and pressure filter facilities. Those attending will learn valuable skills that are critical to obtaining the best possible treatment results from their facility. Reference material will be provided.

**PREREQUISITE:**

Candidates should be working in a water treatment facility that incorporates filtration.

**COURSE OUTLINE:**

Filtration theory  
Iron and manganese removal  
Filter media  
Backwash management  
Filter maintenance and troubleshooting  
Alternate technologies  
Pilot testing

**COST:**

\$350 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

January 17 & 18, 2007      Red Deer Lodge, Red Deer  
Red Deer                      Reservations; 1-800-661-1657

**Early registration is a MUST!**

**This course was very popular in previous years and space is limited.**

**Please note that NO walk in/on-site registrations will be accepted.**

This is an advanced, two day course, intended for facility operators, supervisors, engineers and designers to learn more about microprocessor based control systems. The course will appeal to those individuals with water and wastewater operating experience, but with little or no instrumentation background. Prior completion of "Process Control Instrumentation Basics" is an asset but not required.

The presenter is Mr. Glen Horne of Camenex Control Systems Ltd. Glen has many years of experience designing and optimizing control systems at water and wastewater facilities.

**PREREQUISITE:**

Candidates should be familiar with the operation of water and wastewater facilities.

**COURSE OUTLINE:**

Process control  
Instruments  
On-Line analysers  
PID control  
Programmable logic controllers  
Computer based control  
Safety considerations  
Future trends and case studies

**COST:**

\$300 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

February 5 & 6, 2007                      Glenmore Inn, Calgary (\$93 per night)  
Calgary    Reservations; 1-800-661-3163

**As space and instructional material is limited,  
NO walk-in or on-site registration will be accepted.**

## **WHAT'S NEW at BANFF? – LOTS!!**

**WE'RE BEGINNING the SEMINAR EARLY, WE'VE ADDED a LUNCH, WE'VE CHANGED the DISPLAY HOURS and REGISTERED OPERATORS who PRESENT A PAPER will qualify for a \$100 HONORARIUM and 1.0 CEU!!**

*NEW;* The 2007 Operators Seminar will begin at **12:00pm** on **Tuesday, March 13/07** with a complimentary delegates' lunch at stations throughout the displays. The number of exhibit booths has been increased substantially and displays will be open **ALL DAY** from **noon-9:00pm** on **Tuesday ONLY**. The "passport draw" will still be held but at the **ANNUAL GENERAL MEETING** on **Wednesday afternoon, March 14/07** – as usual, delegates must be on hand to win!

*NEW:* The delegate registration hours are extended with the desk now open from **8:30AM-8:30PM** on **Tuesday** for the convenience of anyone arriving early. **Please note;** anyone who does not pre-register (before the posted deadline of March 5/07) will need to register on-site in Banff and must pay with a credit card or cash ONLY.

*NEW:* The 2007 Banff Seminar committee is also offering a \$100 honorarium and 1.0 CEU to operators registered at the Seminar who have papers accepted for presentation. The deadline for submitting papers is January 31, 2007 – please access our website at [www.awwoa.ab.ca](http://www.awwoa.ab.ca) for an application to present. Successful applicants will receive the honorarium and CEU credit at the conclusion of the Seminar.

*NEW:* The Banff Seminar registration form has also changed. The registration fee **DOES NOT INCLUDE** the cost of the banquet ticket and the registration fees have been reduced accordingly. **Should you wish to attend the banquet, you must indicate on the BANQUET TICKET PURCHASE line. If you have not filled in this line, you will not be issued a banquet ticket.** The cost of the banquet has increased steadily over the years and has been subsidized in the past by the AWWOA. The amount indicated on the Banquet Ticket Purchase line reflects the actual cost of the banquet. Please note the new fee schedule when completing the registration form.

*NEW:* Delegates should indicate if they are planning to participate in the Tuesday luncheon. This step and that of having a separate line for the Banquet have been taken in an effort to better identify actual numbers of attendees at these functions.

As usual, the Banff seminar will bring operators up-to-date on a variety of topics in the water and wastewater field. Speakers include operators, supervisors, technical industry representatives, and other experts in their fields. Informative topics will give operators the chance to review recent technical & equipment developments as well as learn how other operators are optimizing their operations.

The Operators Seminar is intended for operators, foremen, and superintendents although anyone in the water and wastewater industry is welcome to attend. This event will offer excellent topics and speakers, networking opportunities and social interaction. As well, a special program will provide guests with a variety of activities. A preliminary list of presentations and details of the Guest Program will be made available on the AWWOA website at [www.awwoa.ab.ca](http://www.awwoa.ab.ca) or it can be faxed on request after January 31, 2007. If registering for the Guest Program, please print the guest's name in space provided.

**Please see the following pages for a schedule of events for the Seminar.**  
**NOTE the NEW TIMES for DISPLAY VIEWING and OTHER EVENTS.**

**COST:**

**Note: Late registrations will be processed at Banff – payment by credit card or cash ONLY will be accepted if registering in Banff.**

\$210 plus GST per person for AWWOA members – **DOES NOT** include a banquet ticket

\$260 plus GST per person for non members – **DOES NOT** include a banquet ticket

\$120 plus GST per person for single day registration- **DOES NOT** include a banquet ticket

\$120 plus GST per person for the Guest Program – includes a banquet ticket

Registrations for the Seminar will be accepted **from September 1/06 until March 5/07**. Anyone who has not been confirmed as registered by March 5/07 will need to register in Banff. Payment via VISA, MasterCard or purchase orders is accepted for pre-registration ONLY- if you register **at Banff**, cash or credit card ONLY will be accepted.

**NEW REGISTRATION FAX NUMBER is (780) 454-7748**

**DATES and LOCATION**

March 13-16, 2007

Banff Park Lodge, 222 Lynx Street, Banff. Reservations; 1-800-661-9266

Please complete the special Banff Seminar application form on page 39 and FAX it back to

**(780) 454-7748** Registrations will be confirmed by return fax or e-mail.

A **CEU claim form** will once again be included in registration envelopes

**32<sup>nd</sup> ANNUAL ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION  
OPERATORS' SEMINAR  
MARCH 13-16, 2007**

The Alberta Water & Wastewater Operators Association is once again pleased to invite your attendance at its Operators' Seminar that will be held at the **Banff Park Lodge**, 222 Lynx Street, Banff from Tuesday, March 13 – Friday, March 16, 2007. The Seminar will include many interesting presentations focusing on industry issues. It will also offer an entertaining Guest Program and over **150** displays featuring the latest in products and services. **The agenda for the 2007 Seminar differs from other years! WE'LL BE STARTING the SEMINAR with LUNCH on TUESDAY and DISPLAYS ALL DAY and EVENING on TUESDAY!**

Tuesday, March 13, 2007	8:30am - 8:30pm 12:00pm-1:30pm 12:00pm-9:00pm 6:15pm – 9:00pm 9:00pm-10:00pm	Delegate Registration – lobby <b>DELEGATE LUNCH in display area</b> <b>Displays Open for viewing</b> Wine and Cheese Reception <b>Displays removed</b>
Wednesday, March 14, 2007	8:00am - 12:00pm 8:30am- 12:00pm  9:00am – 10:15am 10:30am – 12:00pm  12:00pm – 1:30pm 1:30pm – 3:00pm  3:15pm - 4:30pm	Delegate Registration – lobby Workshop; pre-registration only  Technical Sessions Technical Sessions  Lunch Break AWWOA Annual Business Meeting <b>and Passport Draw</b>  Technical Sessions
Thursday, March 15, 2007	8:00am – 10:30am 9:00am – 12:00pm  12:00pm -1:30pm 1:30pm – 4:30pm  6:00pm -7:00pm 7:00pm – 1:00am	Delegate Registration – lobby Technical Sessions  Lunch Break Technical Sessions  Reception Banquet and Entertainment
Friday, March 16, 2007	9:00am – 12:00pm  12:00pm	Workshop  Seminar Closing

For further Seminar information, please contact AWWOA Toll free; 1-877-454-7745, local (780) 454-7745, office fax; (780) 454-7748 **Banff Registration Fax; (780) 454-7748**  
E-mail: [awwoa@telus.net](mailto:awwoa@telus.net) Website: [www.awwoa.ab.ca](http://www.awwoa.ab.ca)

**PLEASE NOTE THE CONTACT INFORMATION for the AWWOA OFFICE  
11810 Kingsway Avenue, Edmonton, AB T5G 0X5**

**PLEASE COMPLETE SEMINAR REGISTRATION FORM AT END OF THIS BROCHURE**

This three-day workshop covers the theoretical and practical aspects of chlorination, the handling and use of chlorine and chlorine compounds, as well as the operation and maintenance of chlorination equipment. It is intended for operators working in a municipality who wish to upgrade their knowledge of chlorination and chlorinators. Emphasis is placed on gas chlorination.

**PREREQUISITE:**

Candidates should be working in a facility that uses chlorine gas or a hypochlorite for disinfecting potable water or wastewater effluent. There will be a course completion exam. To receive continuing education units (CEUs), a mark of 70% must be achieved.

**COURSE OUTLINE:**

Properties of chlorine  
Chlorination applications  
Principles of disinfection  
Alternative disinfectants  
Dosage calculations  
Chlorine safety  
Handling of chlorine  
Chlorination equipment  
Chlorinator operation  
Troubleshooting  
Control systems  
Maintenance of chlorine systems  
Chlorine analysis

**COST:**

\$375 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

April 10-12, 2007                      Capri Hotel, Red Deer  
Red Deer                                      Reservations; 1-800-662-7197

**Please note that NO walk in/on-site registrations will be accepted.  
This course has been very popular in past years – register early.**



This one-day course is designed to assist the operator with the operation and maintenance of small water treatment and water distribution systems. It is an introductory course intended for operators of Class 1 facilities employed in municipalities with a population up to 500. Operators in large municipalities may not find this course completely relevant to their duties. **COMPLETION OF THIS COURSE IS ONLY PART OF THE PREREQUISITE FOR SMALL SYSTEMS CERTIFICATION.** Alberta Environment administers a separate Operator Certification Exam.

**PREREQUISITE:**

Candidates should be employed or commencing employment at a municipal facility.

**COURSE OUTLINE:**

Characteristics of groundwater  
Well pumps and maintenance  
Disinfection/public health  
Pressure filters  
Iron removal/sequestering  
Water production and storage  
Reservoirs  
Pipe installation and maintenance  
Distribution system maintenance

**COST:**

\$175 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

April 25, 2007	Red Deer Lodge, Red Deer
Red Deer	Reservations; 1-800-661-1657

This course is also available in a home study format for those who cannot attend the classroom sessions. Please see "Home study Courses" for details.

**Please note that NO walk in/on-site registrations will be accepted.**

This one-day course is designed to assist the operator with the operation and maintenance of small wastewater treatment and collection systems. It is an introductory course intended for operators of Class 1 facilities employed in municipalities with a population up to 500. Operators in large municipalities may not find this course completely relevant to their duties. **COMPLETION OF THIS COURSE IS ONLY PART OF THE PREREQUISITE FOR SMALL SYSTEMS CERTIFICATION.** Alberta Environment administers a separate Operator Certification Exam.

**PREREQUISITE:**

Candidates should be employed or commencing employment at a municipal facility.

**COURSE OUTLINE:**

Wastewater collection systems  
Lift stations  
Testing-reporting  
Collection systems maintenance  
Wastewater lagoon systems  
Lagoon maintenance/operation

**COST:**

\$175 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

April 26, 2007                      Red Deer Lodge, Red Deer  
Red Deer                              Reservations; 1-800-661-1657

This course is also available in a home study format for those who cannot attend the classroom sessions. Please see "Home study Courses" for details.

**Please note that NO walk in/on-site registrations will be accepted**

This two-day course will be held in the Northern Alberta Institute of Technology lab and, as such, is very limited in enrollment – please register early. Information covered in this session will include routine inspection and maintenance of hydrants and valves. It is intended to give operators in small communities the information required to set up a basic preventative maintenance program.

No advance material will be sent as the instructor will distribute manuals in class. Parking passes for NAIT will also be issued on the first morning. ALL students should wear steel toe boots to class for the Hydrant portion of this session.

**PREREQUISITE**

Candidates should be enrolled at a municipal facility

**COURSE OUTLINE**

Types and parts  
Inspection  
Installation  
Maintenance  
Corrosion and corrosion control  
Testing

**COST**

\$350 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to Alberta Water & Wastewater Operators Association.

**DATES and LOCATION**

June 4 & 5, 2007  
Edmonton

NAIT, Main Campus  
11762- 106 Street, Edmonton  
Recommended Hotel; Chateau Louis, Reservations; (780) 452-7770

**NO walk-in registrations will be allowed at this course.  
Enrollment is limited to just 24 people- please register early**

## CERTIFICATION EXAM PREPARATION COURSES

### LEVEL I CERTIFICATION PREPARATION COURSE

**5.0 CEUs**

This two-part course, held over four days, will provide information necessary to properly operate any Class I system or facility. It is also intended as preparation for the Level I Certification exams. Applicants must be prepared to attend **both** parts of the course and to complete assigned work prior to both parts. A manual and workbook will be mailed a month prior to the course start date and **MUST** be completed. Three sessions of this course will be held to maximize registration. **COMPLETION OF THIS COURSE DOES NOT FULFILL CERTIFICATION REQUIREMENTS.**

**NOTE:** Applicants who wish to write their certification exam must qualify and **MUST APPLY** to Alberta Environment for certification prior to the advertised deadline for their preferred exam date. Information on certification may be obtained by calling Alberta Environment at (780) 427-7713, fax; 427-5204 or e-mail; [wasteandwater.certification@gov.ab.ca](mailto:wasteandwater.certification@gov.ab.ca). Please see the exam schedule below and contact AENV for an application for certification well in advance of the deadlines. When applying for certification, please indicate registration in the Level 1 course. If all other requirements for certification (education, experience) are met, an operator may be **conditionally approved** to write the certification exam.

#### **COST:**

\$400 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

#### **DATES and LOCATION:**

<b>SESSION #1;</b> Edmonton October 4 & 5, 2006 November 8 & 9, 2006	Chateau Louis, Edmonton Reservations; (780) 452-7770 PART A PART B	(workbook, manual sent Sept.5/06)
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<b>SESSION #2;</b> Calgary Jan. 22 & 23, 2007 Feb. 27 & 28, 2007	Glenmore Inn, Calgary (\$93 per night) Reservations; 1-800-661-3163 PART A PART B	(workbook, manual sent Dec.12/06)
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<b>SESSION #3;</b> Edmonton Apr.3 & 4, 2007 May 9 & 10,2007	Chateau Louis, Edmonton Reservations; (780) 452-7770 PART A PART B	(workbook, manual sent Feb.15/07)
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#### **SCHEDULED CERTIFICATION EXAM DATES and LOCATION:**

November 10, 2006	Calgary & Edmonton;	<b>application deadline is September 20/06</b>
March 13, 2007	Banff Park Lodge, Banff	<b>application deadline is January 20/07</b>
May 11, 2007; Level I registrants only, Edmonton		<b>application deadline is April 10/07</b>
May 22-25, 2007	various locations	<b>application deadline is April10/07</b>

This course is also available in correspondence format for those who cannot attend the classroom sessions. Please see "Correspondence Courses" for further details.

**LEVEL I**

**WATER TREATMENT/DISTRIBUTION CERTIFICATION PREPARATION COURSE**

**2.4 CEUs**

This 4-day course will provide information in the area of Water Treatment and Distribution as it pertains to a Class I system or facility. It will assist students in preparing to write the water treatment Level I certification exams. No advance material will be forwarded to students with this course as the instructor will distribute information and review pertinent areas in class. **COMPLETION OF THIS COURSE DOES NOT FULFILL CERTIFICATION REQUIREMENTS.**

**NOTE: Applicants who wish to write their certification exam must qualify and MUST APPLY to Alberta Environment for certification prior to the advertised deadline for their preferred exam date. Further information on certification may be obtained by calling Alberta Environment at (780) 427-7713, fax; 427-5204 or e-mail [wasteandwater.certification@gov.ab.ca](mailto:wasteandwater.certification@gov.ab.ca). Please see the exam schedule below and contact AENV for an application for certification well in advance of the deadlines. When applying for certification, please indicate registration in this Level I modified course. If all other requirements for certification (education, experience) are met, an operator may be **conditionally approved** to write the certification exam.**

**PREREQUISITE**

Candidates should be employed in a Class I municipal facility

**COURSE OUTLINE:**

Introduction – legislation and municipal standards	Administration
Safety	Water Treatment
Basic technical skills	Water Distribution
Support Systems	

**COST:**

\$700 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

October 16-October 19, 2006 Fort McMurray	Stonebridge Hotel, Fort McMurray Reservations; 1-888-799-7663
April 16-April 19, 2007 Calgary	Glenmore Inn, Calgary Reservations; 1-800-661-3163

**Please note that NO walk-in/on-site registrations will be accepted.**

**SCHEDULED CERTIFICATION EXAM DATES and LOCATION:**

November 10, 2006	Edmonton, Calgary	<b>application deadline is September 20/06</b>
March 13, 2007	Banff	<b>application deadline is January 20/07</b>
May 22-25, 2007	various Alberta locations	<b>application deadline is April 10/07</b>

**LEVEL II**

**WATER & WASTEWATER TREATMENT CERTIFICATION PREPARATION COURSE**

**3.0 CEUs**

This two-day course will provide information necessary for an operator to operate a Class II water or wastewater treatment facility, as well as prepare for the Level II water or wastewater treatment certification exams. **Although Water Distribution and Wastewater Collection are briefly reviewed, the material in this course covers mainly Water & Wastewater Treatment.** Applicants must be prepared to complete assigned lessons that will be sent out approximately one month prior to the classroom session.

**Note:** All candidates for certification exams must qualify and **MUST APPLY** to Alberta Environment for the exams prior to the advertised deadline for their preferred exam date. Further information on **certification** may be obtained by calling Alberta Environment at (780) 427-7713, fax; 427-5204 or e-mail at [wastewater.certification@gov.ab.ca](mailto:wastewater.certification@gov.ab.ca)

**PREREQUISITE:**

Candidates should hold a Level I Water and/or Wastewater Treatment Certification. If an operator does not hold Level I certification, it is recommended that the candidate review the Level I material prior to attending this course.

**COST:**

\$350 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

November 1 & 2, 2006	Chateau Louis, Edmonton	(course material sent Sept.15/06)
Edmonton	Reservations; (780) 452-7770	

**Please note that NO walk in/on-site registrations will be accepted.**

**SCHEDULED CERTIFICATION EXAM DATES and LOCATION:**

November 10, 2006	Edmonton, Calgary	<b>application deadline is September 20/06</b>
March 13, 2007	Banff	<b>application deadline is January 20/07</b>
May 22-25, 2007	various Alberta locations	<b>application deadline is April 10/07</b>

This course is available in correspondence format for those who cannot attend the classroom sessions. Please see "Correspondence Courses" for further details.

**LEVEL III / IV**

**WATER TREATMENT CERTIFICATION PREPARATION COURSE**

**3.0 CEUs**

The Level III and IV Water Treatment certification preparation course is intended for candidates planning to write Level III or IV Water Treatment certification exams. This four-day course was developed with the aim of increasing the knowledge of present operators and to provide a source of reference material for those studying to write certification exams. The subject matter is covered through a combination of lectures, videos, group exercises and mock exams. Participants will receive a course manual.

**COMPLETION OF THIS COURSE DOES NOT FULFILL CERTIFICATION REQUIREMENTS.**

**Note:** All candidates for certification exams must qualify and **MUST APPLY** to Alberta Environment for the exam prior to the advertised deadline for their preferred exam date. A certification exam has been set for **November 10/06** for those approved to write **who apply** to Alberta Environment before the **September 10/06** deadline. For additional certification information, please contact Alberta Environment at (780) 427-7713, fax: 427-5204 or [wasteandwater.certification@gov.ab.ca](mailto:wasteandwater.certification@gov.ab.ca)

**PREREQUISITE:**

Candidates should hold Level II or higher Water Treatment Certification and should be working in a Class II or higher water treatment facility.

**COURSE OUTLINE:**

- Regulatory standards and issues
- Water sources and water source protection
- Water quality and water analysis
- Multi-barrier treatment technologies
- Alternate treatment technologies
- Disinfection by-product mitigation technologies
- Process optimization and troubleshooting
- Performance limiting factors, technical supervision and management

**COST:**

\$700 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

January 8- 11, 2007	Chateau Louis, Edmonton	no advance material sent
Edmonton	Reservations; (780) 452-7770	

**SCHEDULED CERTIFICATION EXAM DATES and LOCATION:**

November 10, 2006	Calgary & Edmonton;	<b>application deadline is September 20/06</b>
March 13, 2007	Banff Park Lodge, Banff	<b>application deadline is January 20/07</b>
May 22-25, 2007	locations across Alberta	<b>application deadline is April 10/07</b>

**Please REGISTER EARLY – insufficient enrollment may cause course cancellation.  
Please note that NO walk in/on-site registrations will be accepted.**

**LEVEL III/IV**

**WASTEWATER TREATMENT CERTIFICATION PREPARATION COURSE**

**3.0 CEUs**

This 5-day Level III /IV wastewater treatment course will focus on Wastewater Treatment and is intended for candidates who are prepared to write Level III or Level IV Wastewater Treatment certification exams. This course will be presented jointly with the British Columbia Water & Wastewater Association (BCWWA) and will use the material offered by BCWWA. The subject matter is covered through a combination of lectures, videos, and group exercises. Participants will receive course material at the session. **COMPLETION OF THIS COURSE DOES NOT FULFILL CERTIFICATION REQUIREMENTS.**

**Note; All candidates for certification exams must qualify and MUST APPLY to Alberta Environment for the exam prior to the advertised deadline for their preferred exam date. A certification exam has been set for November 10/06 for those approved to write who apply to Alberta Environment before the September 10/06 deadline.** For additional certification information, please contact Alberta Environment at (780) 427-7713, fax: 427-5204 or [wasteandwater.certification@gov.ab.ca](mailto:wasteandwater.certification@gov.ab.ca)

**PREREQUISITE:**

Candidates should hold Level II or higher Wastewater Treatment Certification and should be working in a Class II or higher wastewater treatment facility

**COURSE OUTLINE:**

Regulatory standards and issues

Pre-treatment

Primary treatment

Secondary treatment

Tertiary treatment and other issues pertinent to wastewater treatment

**COST:**

\$700 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to Alberta Water & Wastewater Operators Association.

**DATES and LOCATION:**

October 30- Nov. 3, 2006  
Calgary

Glenmore Inn, Calgary  
Reservations; 1-800-661-3163

no advance material sent

**SCHEDULED CERTIFICATION EXAM DATES and LOCATION:**

November 10, 2006

Calgary & Edmonton

application deadline is September 20/06

March 13, 2007

Banff

application deadline is January 20/07

May 22-25, 2007

locations across Alberta

application deadline is April 10/07

**Please register early- insufficient enrollment may cause course cancellation**

**Please note that NO walk in/on-site registrations will be accepted.**



## CORRESPONDENCE and HOME STUDY COURSES

### CORRESPONDENCE and HOME STUDY COURSES: GENERAL INFORMATION

**Correspondence** courses have been designed for those operators who cannot attend classroom sessions. Registrants will receive a training manual/reference book/videos/DVDs and workbook with review lessons that must be mailed back for marking. Certain items of course material must be returned. Applicants will be advised which material is on loan and which they may keep. Once all the lessons have been completed, mailed in, and marked by an authorized person, a date can be set up with the operator's supervisor to write the course completion exam. This is arranged with the AWWOA training course registrar. Upon receiving a passing grade (70%), the operator will be notified and a course completion certificate mailed.

Deadlines for registering for correspondence courses end April 30, 2007. A registrant must complete the correspondence course within one year of receiving the course material.

**To apply for correspondence courses, please complete the application form at the end of this brochure and indicate that it is a correspondence course. Use a different form for each person registering.**

**Home Study** courses have also been designed for those operators who cannot attend classroom sessions. They have been developed by Environment Canada, the Water Environment Federation (WEF) and Skeet Arasmith for operators of water and wastewater treatment facilities. These courses are set up in a workbook/VHS or DVD format. The home study registrant will view the VHS tape or DVD, read through a workbook review summary and then complete a short quiz for the lesson. All lessons are personally marked by the operator. To receive CEU credits for the home study course, an operator must pass a supervised course completion exam which must be arranged through the AWWOA training course registrar. Please contact the registrar when comfortable with the course material. Upon receiving a passing grade (70%), the operator will be notified and a course completion certificate mailed.

Applications to register for home study courses will be accepted until April 30, 2007. Registrants must complete the home study course within one year of receiving the course material.

**To apply for home study courses, please complete the application form that is attached and indicate that it is a home study course. Use a different form for each person registering.**

**CORRESPONDENCE:**  
**W.C.W.W.A. – WATER TREATMENT PLANT OPERATIONS**

**15.0 CEUs**

This correspondence course is sponsored by the Western Canada Water and Wastewater Association (WCWWA) and administered by the AWWOA. It covers the practical aspects of operating a water treatment plant that utilizes coagulation, sedimentation, and filtration. It has been designed to keep the content pertinent to on-the-job operations. Once an operator has completed all of the mail in lessons and had them marked, a supervised course completion exam can be arranged. If this is passed (70%), a course completion certificate from WCWWA will be mailed. Please note that this is an in-depth course and an operator must be prepared to commit extensive time to complete it successfully.

Registrants have one year from receipt of the material to complete this course.

Material for this course will consist of a reference manual, participant workbook/review lessons and 15 mail-in lessons.

**PREREQUISITE**

Candidates should be employed by a municipality and actively working in a water treatment plant. Operators **MUST** have access to a plant that uses coagulation, sedimentation, and filtration to register for this course – some testing equipment is required.

**COURSE OUTLINE:**

Facets of water supply	Sedimentation basics
Chemistry & water quality	Filtration
Bacteria and algae	Corrosion control
The physical plant	Chlorination
Pumping rates	Safety
Chemical feeders	Ph and alkalinity
Coagulation	

**COST:**

\$400 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DEADLINES for REGISTERING**

This correspondence course will begin registering on September 1, 2006 and registrations will be accepted until **April 30, 2007**. A course completion exam may be sent to a supervisor once all 15 lessons have been completed and marked. Pass mark is 70%.

**CORRESPONDENCE:**  
**W.C.W.W.A. – PRACTICAL MATHEMATICS**

**9.0 CEUs**

This correspondence course is sponsored by the Western Canada Water and Wastewater Association (WCWWA) and administered by the AWWOA. It covers the basic mathematics skills required by a water or wastewater operator. It also gives practical experience in the application of this math to water and wastewater problems. This course will be of interest to operators who have difficulty with math or those who wish to upgrade their skills. Once a registrant has completed all of the mail in lessons, a supervised course completion exam can be arranged. If this is passed (70%), a course completion certificate from WCWWA will be mailed.

Registrants have one year from receipt of the material to complete this course.

Material for this course will consist of a reference manual, participant workbook/review lessons and 10 mail-in lessons.

**PREREQUISITE:**

None

**COURSE OUTLINE:**

Whole numbers, fractions, decimals  
Basic mathematics  
Area, volume, ratios, metric units  
Water treatment problems  
Water distribution problems  
Wastewater collection problems  
Wastewater treatment problems  
Everyday use of math

**COST:**

\$350 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DEADLINES for REGISTERING**

This correspondence course will begin registering on September 1, 2006 and registrations will be accepted until **April 30, 2007**. A course completion exam may be sent to a supervisor once all 10 lessons have been completed and marked. Pass mark is 70%.

**CORRESPONDENCE:**  
**LEVEL I CERTIFICATION PREPARATION**

**5.0 CEUs**

The AWWOA has developed this course for operators who are unable to attend the four-day classroom course. It provides information necessary to properly operate a Class I system or facility and is designed as preparation for the Level I certification exams. Once all lessons have been completed, returned for marking and a student has passed the course completion exam (70%), a course completion certificate will be issued by AWWOA.

Material for this course will consist of 2 reference manuals, the Guidelines for Canadian Drinking Water Quality, a participant workbook with 9 mail-in review lessons, and a set of DVDs. The DVD's must be returned to the training course registrar. **NOTE:** Candidates have 6 weeks to return the DVDs and one year from receipt of the Level I materials to complete this course.

**PREREQUISITE:**

None

**COURSE OUTLINE:**

Introduction- legislation and municipal standards	Water treatment
Safety	Water distribution
Basic technical skills	Wastewater collection
Support systems	Wastewater treatment
Administration	

**Completion of this course does NOT fulfill certification requirements.** Operators who wish to write the certification exam **MUST QUALIFY and MUST APPLY** to Alberta Environment prior to the advertised deadline for their preferred exam date. Operators taking this Level 1 correspondence course **must complete the course AND the course completion exam TWO WEEKS PRIOR** to the scheduled certification exam dates. Failure to do so will result in the rejection of the application for certification and you will be required to reapply for another exam session. When applying, please indicate registration in this course. If all other requirements (education, experience) are met, the application may be **conditionally** approved. The course **must** be completed ***before an operator will be permitted to write the certification exam.***

**COST:**

\$400 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DEADLINES for REGISTERING:**

This correspondence course will begin registration on September 1, 2006 but registrations will not be accepted after **April 30, 2007.**

**CERTIFICATION EXAM SCHEDULE**

November 10/06	in Calgary, Edmonton	<b>application deadline is September 20/06</b>
March 13/07	in Banff	<b>application deadline is January 20/07</b>
May 22-25/07	various locations	<b>application deadline is April 10/07</b>

**CORRESPONDENCE:**  
**LEVEL II CERTIFICATION PREPARATION**

**3.0 CEUs**

The AWWOA has developed this course for operators who are unable to attend the two-day classroom course. **Although Water Distribution and Wastewater Collection are briefly reviewed, the material in this course covers mainly Water & Wastewater Treatment.** This course provides the information necessary to properly operate a Class II water or wastewater treatment system or facility but is intended as preparation for Level II certification exams. If a candidate does not hold a Level I certification, it is recommended that a review be conducted of the Level I material prior to taking this course. Upon passing the course completion exam, a course completion certificate will be issued by AWWOA.

Material for this course consists of a reference manual, a participant workbook with 4 mail-in review lessons, and 2 DVDs. These DVDs that must be returned to training course registrar.

**Note:** Candidates have 6 weeks to return the DVDs and one year from receipt of the Level II materials to complete this course.

**PREREQUISITE:**

The candidate should hold a Level I Water and/or Wastewater Treatment Certificate and should be working in a Level II or higher facility.

**COURSE OUTLINE:**

Support systems                      Water treatment                      Wastewater treatment

**Completion of this course does NOT fulfill certification requirements. ALL candidates for certification exams must qualify and MUST APPLY to Alberta Environment for the exams prior to the advertised deadline for their preferred exam date.**

**COST:**

\$350 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DEADLINES for REGISTERING:**

This correspondence course will begin registration on September 1, 2006 but registrations will not be accepted after **April 30, 2007.**

**CERTIFICATION EXAM SCHEDULE:**

November 10/06	in Calgary, Edmonton	<b>application deadline is September 20/06</b>
March 13/07	in Banff	<b>application deadline is January 20/07</b>
May 22-25/07	various locations	<b>application deadline is April 10/07</b>

**HOME STUDY COURSES:**  
**SMALL WATER SYSTEMS**

**0.6 CEUs**

This course is designed to assist operators with the operation and maintenance of small water treatment and water distribution systems. It may also be useful for preparation for the Small Water Systems Certification Exam. It is an introductory course designed for operators employed in municipalities up to 500 population. Operators in large municipalities may not find this course completely relevant to their duties. Upon completion of the course, a supervised course completion exam can be arranged by notifying the AWWOA registrar. Upon passing this exam (70%), a course completion certificate will be issued by AWWOA.

**Completion of this course is only part of the prerequisite for small water systems certification. Applicants who wish to write the certification exam must qualify and MUST APPLY to Alberta Environment prior to the advertised deadline for their preferred exam date.**

Material for this course consists of a reference manual, participant workbook/review lessons and a DVD.

**PREREQUISITE:**

Candidates should be employed or commencing employment at a municipal facility

**COURSE OUTLINE:**

Characteristics of ground water	Well pumps and maintenance
Disinfection/ public health	Pressure filters
Iron removal/sequestering	Water production and storage
Reservoirs	Pipe installation and maintenance
Distribution system maintenance	

**COST:**

\$175 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DEADLINES for REGISTERING:**

Applications for home study courses will be accepted from September 1, 2006 until April 30, 2007.

**CERTIFICATION EXAM SCHEDULE:**

November 10/06	in Calgary, Edmonton	<b>application deadline is September 20/06</b>
March 13/07	in Banff	<b>application deadline is January 20/07</b>
May 22-25/07	various locations	<b>application deadline is April 10/07</b>

**HOME STUDY COURSES:**  
**SMALL WASTEWATER SYSTEMS**

**0.6 CEUs**

This course is designed to assist the operator with the operation and maintenance of small wastewater collection and lagoon systems. It may also be useful in preparation for the Small Wastewater Systems Certification Exam. It is an introductory course intended for operators employed in municipalities up to 500 population. Operators in large municipalities may not find this course completely relevant to their duties. Upon completion of this course, a supervised course exam can be arranged by notifying the AWWOA registrar. Upon passing this review exam (70%), a course completion certificate will be issued by AWWOA.

**Completion of this course does NOT fulfill certification requirements. ALL candidates for certification exams must qualify and MUST APPLY to Alberta Environment for the exams prior to the advertised deadline for their preferred exam date.**

Material for this course consists of a reference manual, participant workbook/review lessons and a DVD.

**PREREQUISITE:**

Candidates should be employed or commencing employment in a municipal facility.

**COURSE OUTLINE:**

Wastewater collection systems  
Testing – reporting  
Wastewater lagoon systems

Lift stations  
Collection systems maintenance  
Lagoon maintenance/operation

**COST:**

\$175 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DEADLINES for REGISTERING:**

Applications for home study courses will be accepted from September 1, 2006 until April 30, 2007.

**CERTIFICATION EXAM SCHEDULE:**

November 10/06                      in Calgary, Edmonton  
March 13/07                            in Banff  
May 22-25/07                        various locations

**application deadline is September 20/06**  
**application deadline is January 20/07**  
**application deadline is April 10/07**

**HOME STUDY COURSES:**  
**ROTATING BIOLOGICAL CONTACTOR (RBC)**

**2.0 CEUs**

This course deals with the theory, operation and maintenance of the Rotating Biological Contactor wastewater treatment system. It is intended for operators who work in RBC mechanical wastewater treatment plants or those employed by a municipality that is considering constructing an RBC facility. Upon completion of this course, a supervised course exam can be arranged. Upon passing the review exam, a course completion certificate will be issued by AWWOA.

Material for this course consists of a participant workbook, a reference manual and DVD. The manual and DVD must be returned to the training course registrar. Students may keep the workbook.

**Note:** Candidates have approximately four weeks after receiving course material to return the manual and DVD. Students have one year from receiving the material to complete the course.

**PREREQUISITE:**

Candidates should be employed at a municipal RBC plant

**COURSE OUTLINE:**

The RBC system	RBC components and equipment
Start-up and shut down	Equipment maintenance
The RBC process	Normal operation
Factors affecting process	Performance parameters
Troubleshooting	

**COST:**

\$350 plus GST, payable upon application. VISA, MasterCard and purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DEADLINES for REGISTERING:**

Applications for home study courses will be accepted from September 1, 2006 until April 30, 2007. Applications will be accepted on a "first received" basis.



**HOME STUDY COURSES:**  
**PUMPS; THEORY, OPERATION and MAINTENANCE**

**3.0 CEUs**

This is a detailed home study course covering the theory and practical operation of pumps. It is intended to increase the operator's knowledge of pumps and their maintenance and repair. Upon completion of this course, a supervised course exam can be arranged. Upon passing of this review exam, a course completion certificate will be issued by AWWOA.

Material for this course consists of a participant workbook/review lessons and a reference manual with 10 VHS tapes. The manual and tapes must be returned to the training course registrar.

**Note:** Candidates have approximately four weeks after receiving the course material to complete this course

**PREREQUISITE:**

Candidates should be employed at a municipal facility.

**COURSE OUTLINE:**

Centrifugal pump theory	Pump types
Nomenclature	Component replacement
Packing selection and replacement	Mechanical Seal Selection, replacement
Roller and ball bearings	Lubrication
Lineshaft turbines	Special pumping units
Operating and troubleshooting	Pump curves

**COST:**

\$350 plus GST, payable upon application. VISA, MasterCard or purchase orders accepted. Please make cheques payable to the Alberta Water & Wastewater Operators Association.

**DEADLINES for REGISTERING:**

Applications for home study courses will be accepted from September 1, 2006 until April 30, 2007. Applications will be accepted on a "first received" basis.

**Should this course fail to be returned in its original condition, a fee of \$500.00 will be levied.**

**This is a very popular course – please anticipate a brief waiting period before delivery.**

## **OTHER WATER and WASTEWATER TRAINING COURSES in ALBERTA**

Northern Alberta Institute of Technology (NAIT) offers a full time municipal water and wastewater operator-training program from January to December each year. They also provide a Distance Delivery Program that is available to students through use of correspondence course material, audiovisual packages, telephone tutorials, and some on-campus laboratory work. The following courses are offered:

Basic Sciences  
Water Distribution I  
Water Treatment I  
Wastewater Collection Systems I  
Wastewater Treatment I  
Water Distribution II  
Water Treatment II  
Support Systems  
Wastewater Collection Systems II  
Wastewater Treatment II  
Technical Management and Supervision  
Computer Software Applications  
Water and Wastewater Laboratory Analysis I  
Water and Wastewater Laboratory Analysis II  
Standard First Aid (St. John's Ambulance)  
Work Experience – 500 hours

For registration forms and additional information on the above courses, please contact:

Northern Alberta Institute of Technology (NAIT)  
Registrar's Office  
11762 – 106 Street  
Edmonton, Alta. T5G 2R1

For information on the Training Bursaries offered by AWWOA that may be available for the above training, please see our web site at [www.awwoa.ab.ca/acrobat/AWWOABylaws.pdf](http://www.awwoa.ab.ca/acrobat/AWWOABylaws.pdf)

**Alberta Water & Wastewater Operators Association  
2006-2007 TRAINING COURSE REGISTRATION**

PLEASE DO NOT USE THIS FORM FOR BANFF SEMINAR

Please print clearly, and use a separate form for each person registering for a course.

NAME; \_\_\_\_\_ COMMUNITY/EMPLOYER; \_\_\_\_\_

**BILLING ADDRESS** (and address where credit card payment copies should be sent)

**COURSE MATERIAL SHOULD BE SENT to THIS ADDRESS** (if different from billing address)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Postal Code

\_\_\_\_\_ Postal Code

Business phone; (     ) \_\_\_\_\_

**Students will be contacted to confirm receipt of this registration. INDICATE the BEST method for contact (either fax or e-mail). It is the student's responsibility to ensure that registrations are received by the AWWOA office. CONTACT VIA fax (number below) \_\_\_ or E-mail (address below) \_\_\_**

CONTACT FAX NUMBER; (     ) \_\_\_\_\_ E-mail; \_\_\_\_\_

**NAME of COURSE**

**DATE of COURSE, or  
HOMESTUDY/CORRESPONDENCE**

**COST - AWWOA  
GST# R127035400**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ + GST= \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ + GST= \_\_\_\_\_

Applications will be accepted from September 1, 2006 until April 30, 2007

**PLEASE NOTE NEW REGISTRATION FAX and PHONE NUMBER.**

Please complete this form, detach it and **FAX IT to (780) 454-7748.**

Cheques should be mailed to the AWWOA OFFICE at

Alberta Water & Wastewater Operators Association, 11810 Kingsway Avenue, Edmonton, Alta. T5G 0X5.

Toll Free; 1-877-454-7745 or local (780) 454-7745

**VISA and MasterCard Payment Form (Sorry AMEX not accepted)**

NAME; \_\_\_\_\_

CARD # \_\_\_\_\_

(as it appears on the card)

EXPIRY DATE \_\_\_\_\_ AUTHORIZED SIGNATURE \_\_\_\_\_

If using a Purchase Order number, please indicate; # \_\_\_\_\_ Please see over for other contact details.

FOR OFFICE USE ONLY; Date Registration Received;	Paid by VISA _____ M/C _____ P/O _____ Cheque # _____	AWWOA Invoice # _____ Date Sent _____	DATE FAXED; ATTENTION;
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For further information on training courses, please contact the AWWOA Training Course Registrar at

**Toll Free;** 1-877-454-7745  
**Local Calls;** (780) 454-7745  
**Office Fax;** (780) 454-7748  
**Registration fax;** (780) 454-7748  
**E-mail:** [awwoa@telus.net](mailto:awwoa@telus.net)

Contact for the Executive Director, Del Morrison, is

**Toll Free;** 1-877-454-7745  
**Local Calls;** (780) 454-7745  
**Fax;** (780) 451-6451  
**E-mail:** [awwoa1@telus.net](mailto:awwoa1@telus.net)

For information on **certification ONLY**, please call  
Alberta Environment

**Phone;** (780) 427-7713  
**Fax;** (780) 427-5204  
**E-mail:** [wasteandwater.certification@gov.ab.ca](mailto:wasteandwater.certification@gov.ab.ca)

**Refund Policy:** A service charge of \$50 will be levied for cancellation notice received more than 30 days from the course date and a partial refund will be forwarded. Where less than 30 days notice is given, NO REFUND will be allowed. Substitution of registrants will be accepted if they meet course requirements

A confirmation of received application, further information and pre-course instructions will be forwarded to those who return this application form.

Please indicate if this confirmation should be via **fax** or **e-mail**

Please use a SEPARATE APPLICATION FORM or COPY of the APPLICATION FORM for each person registering. A cheque or an INDICATION of PAYMENT must ACCOMPANY REGISTRATION - VISA, MasterCard or purchase order number.

AWWOA GST # is R127035400.

**2007 BANFF OPERATORS' SEMINAR REGISTRATION FORM**  
**(PLEASE PRINT CLEARLY and USE ONE FORM PER PERSON)**

NAME; \_\_\_\_\_  
 (As you wish it to appear on your name badge)

COMMUNITY \_\_\_\_\_  
 (Or employer)

BILLING ADDRESS \_\_\_\_\_  
 \_\_\_\_\_  
**Postal Code**

PHONE; (     ) \_\_\_\_\_

FAX; (     ) \_\_\_\_\_  
**REGISTRATION Confirmed** to this fax#

(**ALL membership inquiries**; please call Western Canada Water & Wastewater Association, 1-877-283-2003)

Member, membership # _____	\$ _____	<b>\$210 DOES NOT include banquet ticket</b>
Non Member	\$ _____	<b>\$260 DOES NOT include banquet ticket</b>
Single Day (Wednesday, Thursday) Please circle which day attending	\$ _____	<b>\$120 DOES NOT include banquet</b>
Display viewing only (Tuesday)	\$ _____	<b>\$50 includes Tuesday lunch</b>
Guest Program (if applicable)	\$ _____	<b>\$120 includes a banquet ticket</b>

Guest's Name for Guest Program ONLY \_\_\_\_\_

BANQUET TICKET for delegates @ \$53	\$ _____	<b>Tickets must be purchased separately</b>
Extra Banquet Tickets, _____ @ \$53 each	\$ _____	<b>Please note; banquet sells out early!</b>
Sub total	\$ _____	
<b>DON'T FORGET TO ADD 6% GST</b>	\$ _____	<b>GST registration # 127035400</b>
<b>TOTAL</b>	\$ _____	<b>Paying by P.O.? # _____</b>

**Will you be attending the complimentary lunch, Tues., March 13/07 12:00-1:30pm? YES \_\_\_ NO \_\_\_**

FOR OFFICE USE; Date Registration Received; AWWOA Invoice # Date Sent;	Paid by VISA _____ M/C _____ P.O. _____ Cheque # _____ Received	IF YOU <u>DO NOT</u> RECEIVE THIS FORM BACK via FAX to the FAX NUMBER GIVEN, CONTACT the AWWOA OFFICE; 1-877-454-7745	YOU ARE CONFIRMED AS A PRE-REGISTERED DELEGATE. PICK UP YOUR REGISTRATION PACKAGE IN BANFF AT THE PRE-REGISTERED TABLE.  CONFIRMED? _____ DATE FAX SENT;
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Please complete and **FAX to (780) 454-7748 if paying with Purchase Order, VISA or MasterCard**  
 Please complete and attach payment if paying by cheque, **MAIL to arrive BEFORE March 5/07**;  
 AWWOA, 11810 Kingsway Avenue, Edmonton, AB T5G 0X5 (Please note new address!)

If paying by VISA or MasterCard; Card # \_\_\_\_\_ Expiry \_\_\_\_ / \_\_\_\_

Name as it appears on Card; \_\_\_\_\_ Signature \_\_\_\_\_

Registrations must be received by **March 5/07** or they will be processed at the AWWOA registration desk at the hotel, Tues., March 13/07. AVOID that "non-registered" lineup, **REGISTER EARLY!!**

**REGISTRATIONS PROCESSED IN BANFF MUST BE PAID BY CREDIT CARD or CASH ONLY**