

BRITISH COLUMBIA OPERATORS DIGEST

A NEWSLETTER FOR WATER
AND WASTEWATER OPERATORS

NOVEMBER 2005 • NUMBER 112

WALKERTON – 5 YEARS LATER

TRAGEDY COULD HAVE BEEN PREVENTED

In May 2000, several serious flaws in the Walkerton, Ontario municipal drinking water system aligned to permit a breakthrough of *E. coli* O157:H7 and *Campylobacter* bacteria, causing seven deaths and more than 2,300 cases of waterborne disease. These included 27 cases of hemolytic uremic syndrome, a serious kidney ailment with potential lifelong implications. Most of these cases were among children aged one to four. Other Walkerton residents have also reported enduring illness.

Walkerton, a town of about 5,000 people in southwestern Ontario, Canada's richest province, is a pleasant and comfortable community like many other towns in this rural region. However, the tragic events of five years ago have left lasting scars on the community and severely undermined the trust many Canadians had in their municipal water supplies. Those events also cost Ontario taxpayers hundreds of millions of dollars.

The trial and recent sentencing of the Walkerton water system operators suggested that nothing they could have done would have prevented the fatal outbreak. The operators were charged with breach of trust, uttering forged documents (falsifying records), and common



nuisance for their roles in the Walkerton outbreak. The prosecution agreed to a plea bargain, dropping the more serious charges in return for guilty pleas to common nuisance. The general manager was sentenced to one year in jail (and released after four months), and the foreman was sentenced to nine months of house arrest.

The plea bargain was based on "facts" attributed to an epidemiologist, not a specialist in disinfection, who claimed that even if the chlorine level in Walkerton's water system had been substantially increased, the illnesses and deaths would still have occurred. However, the official inquiry into the events leading to the tragedy showed that if the system had been monitored properly and the operators had responded effectively to the signs of trouble, the severe outbreak would have been prevented or substantially reduced.

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Environmental Operators Certification Program

The BC Operators Digest is the official newsletter of the Program. Submissions for publication in the Digest are welcome and may be sent to the Editor:

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The Environmental Operators Certification Program is a charter member of the Association of Boards of Certification, and is a Registered Society with over 3,000 active members.

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Increase in Dues and Exam Fees

At the Oct. 3, 2005 EOCB Board Meeting, the Board of Directors voted to increase operators' annual membership dues by \$10.00 per year, as well as increase exam fees. This follows the EOCB Business Plan which was reviewed in April 2005. This dues increase is the first increase since 1996 and is required because of increasing program costs. The new annual dues and exam fees effective January 1, 2006 are:

2006 Annual Dues for all
 Certified Operators \$50.00 (up from \$40.00)
 Exam Fee for New or Existing Operators..... \$100.00 (up from \$65.00)
 Exam Fee for Small System Operators \$50.00 (up from \$40.00)
 GST is charged to all dues and exam fees.

2006 Operator of the Year Nominations

The EOCB Board is seeking nominations for the 2006 Operator of the Year Award. The Vic Terry Award is presented by the BC Water and Waste Association at their annual conference to a certified operator nominated by the EOCB Board. Nominations may be submitted by operators, municipal officials, supervisors, or any member of the BCWWA.

NOMINATION GUIDELINES

- The nominee must be a member of good standing of the EOCB.
- The nominee must have provided exemplary service in water or wastewater operations over an extended period of time.
- Written submissions must be received by January 31, 2006 at the Board Office.

PREVIOUS VIC TERRY AWARD RECIPIENTS

2005	Sandy MacKenzie	1991	No Award
2004	Dennis Dugas	1990	Rod McCabe
2003	Maitland Smith	1989	Norm Burow
2002	Jim McQuarrie	1988	Bernie Udala
2001	Louie Sabbas	1987	Leo Albrecht
2000	Errol Franson	1986	H. Scott Lee
1999	Dave Sivyer	1985	Ted McDowell
1998	Norm Gobbi	1984	Lloyd Scrimshaw
1997	John Tailford	1983	David Bain
1996	Dave McLean	1982	Graeme Faris
1995	Glen Dunville	1981	Richard Morris
1994	No Award	1980	Gerry Stevens
1993	Norm Staff	1979	Dale Cannon
1992	No Award	1978	Robert Wilson

BOARD BUSINESS BRIEFS

BOARD MEETING: OCTOBER 3, 2005, EOCP OFFICE, BURNABY

Directors present: Joe McGowan (Chair), Bob Smith, Leo Albrecht, Don Gare, Mike Gosselin, Pat Miller, Scott Fry, Executive Director Bill Hyslop.

The Board elected Joe McGowan as Chair, with the other Directors remaining in their same appointments.

Joe McGowan reported on the EOCP Communication Plan and the Outreach Program that the EOCP is partnering with the Ministry of Health (MOH) and the BCWWA. The Outreach Program has a committee with members of the three groups along with a consultant who are preparing presentations to be given to local governments, facility owners and operators, and Ministry of Health staff. Beginning in early 2006, there will be approximately 30 information sessions given throughout the province by representatives of the EOCP, MOH and BCWWA to provide information on the Drinking Water Protection Regulations and how the regulations apply to operators, facility owners and regulators.

Pat Miller and Bob Smith reported on the status of the Top Ops and Pump Teardown competitions for the BCWWA Conference in Whistler in April 2006. Bigger and better are the two key words!

The Board awarded a contract to Opertech Consulting Ltd. for the rewrite of the core water and wastewater exams. This project will provide exams with further emphasis on BC and Canadian content which is important to operators, facility owners and governments. These new exams are expected to be in use by mid-2006.

The Board approved dropping the requirement for Grade 10 education for Small Systems exams, which includes the Small Water System and Small Wastewater System exams.

Executive Director Bill Hyslop reported that the new Bulk Water Haulers (Yukon) exam has been completed and is ready for use. A Bulk Water Haulers (Yukon) course is planned for Whitehorse in December.



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OPERATOR'S QUESTION

QUESTION: "I think it would be beneficial to operators to be able to write an exam that they do not qualify for because of a lack of CEU's or DRC just for practice. By doing the exam beforehand (with the related course) would set the operator at ease, or let him or her know what area to continue studying. Both the EOCP and the BCWWA would benefit from the operator paying for the course and exam twice."

ANSWER: Operator certification exams are based on three components: education, experience and examination. The EOCP like other Canadian operator certification programs, require operators to fulfill all three components before qualifying for certification. Allowing an operator to write an exam before he or she is qualified because of lack of education or experience lessens the credibility of the certification.

There are ways to assist the operator prepare for an exam. There are "Need to Know Criteria" documents available online from the Association of Boards of Certification www.abccert.org that provides operators with areas of study for exams. There are practice sample question books available from the AWWA www.awwa.org and WEF www.wef.org/Home.htm. Check their websites and look for publications.

Exam fees that an operator (or employer) pays to the EOCP covers the EOCP's expense for that exam. The EOCP does not profit from exam fees. Exam fees cover costs paid to ABC, exam invigilators, staff time and exam rooms.

Also, if an operator writes an exam and fails, he or she can rewrite the exam after 60 days.

Attending a BCWWA course benefits the operator by providing practical knowledge about the subject that can assist the operator perform his job. The courses are not specifically designed to prepare an operator for an exam; however the operator certainly expands his knowledge. There is nothing to stop an operator from taking the same course more than once.

If an operator has a question concerning certification, please send it along to the Editor or the EOCP office and we will have a Director or staff person answer your question.

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WALKERTON—5 YEARS LATER *(Continued from page 1)*

A two-year, \$9 million public inquiry under Justice Dennis O'Connor provided one report describing the causes of the outbreak (summarized in *Opflow*, June 2002) and a second report that laid out a program to ensure that other Ontario water systems would not repeat the failures that contributed to the Walkerton disaster. The failures in Walkerton happened at many levels, including

- ineffective regulatory oversight,
- inadequate watershed protection, water treatment, and monitoring of barriers for the risks facing Walkerton's vulnerable groundwater system, and
- poor system management.

The inquiry found that chlorine residuals were not measured on most days and fictitious entries for residuals were entered on daily operational sheets.

This article focuses on the roles and responsibilities of the system operators and what actions they should have taken to prevent the tragedy.

THE WELL AND THE OUTBREAK

The outbreak occurred after unusually heavy spring rainfall washed manure from an adjacent farm into a shallow water supply well - Well 5. The farmer was following exemplary farm practices and was not to be faulted, Justice O'Connor's inquiry determined. However, Well 5 was particularly vulnerable to surface contamination because it produced water from an aquifer only 5-8 m (16-26 ft) deep. Also, following the initial pump test in 1978 that showed fecal contamination within 24 hours, the hydrogeologist's report warned of the contamination risks, and microbiological monitoring results over the years confirmed the vulnerability of this groundwater supply.

Yet the only treatment barrier required by the regulator was chlorination to achieve a residual of 0.5 mg/L after a 15-min contact time. If that single requirement had been continuously met, more than 99 percent of the pathogens would have been inactivated. But, although the system foreman was supposed to measure the chlorine residual once a day, the inquiry found that chlorine residuals were not measured on most days and fictitious entries for residuals were entered on daily operational sheets.

The failure to measure chlorine residuals was critical, because the contamination most likely entered Well 5 on May 12, a week before illness became evident in the community. When asked on May 12 and 20 whether there were any problems with the drinking water quality, the general manager of the Walkerton

Public Utilities Commission assured the local health authorities that the water was okay, despite having received adverse microbiological monitoring results on May 17. A boil-water advisory was not issued until May 21, when health authorities concluded the water must be involved. The first victim died on May 22. At least eight days without valid chlorine residual monitoring had passed between the contamination influx and the boil water advisory, after illness was already widespread.

The organic loading from the manure contamination overwhelmed the inadequate, fixed chlorine dose, leaving no disinfection capacity to inactivate the pathogens entering the distribution system. Measuring the chlorine residual would have identified the problem immediately, but no chlorine residuals were measured during this critical period.

THE TRIAL



Justice O'Connor

During their criminal trial in the Ontario Superior Court, the Walkerton PUC system operators - the general manager and the foreman - admitted that they failed to perform monitoring and treatment, withheld adverse monitoring results, and falsified operating records. But they were not solely to blame, nor were they the only ones who could have

prevented the disaster. The inquiry found that severe and systemic deficiencies in the operator training and regulatory systems of the Ontario government contribute to the tragedy.

Despite the operators' admissions, to secure guilty pleas the prosecution agreed to accept as fact an epidemiologist's opinion that dramatically increasing the chlorine level in Walkerton's water system "would not have prevented this tragedy." The epidemiologist, who was the sole expert cited in the official statement of facts at the trial, had acknowledged not being a specialist in disinfection during Justice O'Connor's inquiry. From the epidemiologist's opinion, the prosecution concluded: "It therefore cannot be said that the criminal conduct of [the operators] ... their failure to properly monitor, sample and test the well water ... was, in law, a significant contributing cause of the deaths and injuries."

COULD HAVE, SHOULD HAVE

Although the plea bargain agreement presents the Walkerton tragedy as something that no person, no matter how competent, could have prevented after rain washed manure into Well 5, water professionals must recognize that this characterization is wrong. Many actions could, and should have been taken to prevent contamination of the water supply.

The heavy rains and visible flooding that occurred on May 12 should have compelled the Walkerton operators to com-

WALKERTON—5 YEARS LATER *(Continued from page 4)*



mence more frequent checking of chlorine dosage and residual. Even if they had kept to the limited monitoring schedule required by the regulator, the operators should have recognized that finding low to nonexistent chlorine residual was cause for alarm. They should have increased the chlorine dose immediately to try to achieve a satisfactory residual.

In this particular case, the operators should have recognized Well 5's vulnerability and shut it down, because another, uncompromised well was capable of providing the entire supply for Walkerton. That option was not immediately available because the foreman failed to replace a defective chlorinator on the alternative well until May 19, even though he was aware of the defect weeks before.

Once the operators became aware that unchlorinated water had entered the distribution system, the water storage should have been dosed with chlorine solution and the mains flushed. The regulator and local health authorities should have been notified; if adequate chlorine residual could not be restored, a boil-water advisory should have been issued immediately. These actions could have and should have all been completed in the first 24 hours after the absence of chlorine residual signaled the problem on the morning of May 13.

They had been certified by a grandparenting process that failed to provide them with training needed to do their jobs properly.

WOULD HAVE...

Even if these steps did not eliminate the consumption of contaminated water entirely, they would have substantially reduced the exposure of Walkerton consumers and the resulting health effects. As it was, contaminated water was distributed for a full week longer than necessary. If the policies adopted in 1994 by the Ontario Chlorination Bulletin had been applied to Walkerton PUC as they should have been, the vulnerable shallow well would have been equipped with a continuous chlorine residual analyzer. The continuous monitor should have been established in a fail-safe mode that would have automatically shut off Well 5 when the chlorine residual fell below the set point for minimum effective disinfection.

The Walkerton operators should have realized that because their system was totally reliant on a single chlorination barrier, it was not fail safe and was vulnerable to catastrophic failure.

The requirement for a second barrier (source protection) was identified more than 20 years earlier, but never implemented. Water system operators must be able to recognize the threats to their system contrasted with the system's capability to cope. They have a professional responsibility to ensure deficiencies are identified, made known to management, and effectively remedied. Pending necessary improvements, operators must increase their vigilance and develop contingency plans to cope with periods of stress. Contingency plans should be practiced using simulated incidents before a real crisis develops.

The Walkerton operators lacked the training and expertise to identify the vulnerability of Well 5 and the need for additional safety barriers. They had been certified by a grandparenting process that failed to provide them with the training needed to do their jobs properly. Their experience allowed them to handle the mechanical requirements of their jobs, but they lacked any understanding of water quality or associated public health risks. The Walkerton operators did not intend to harm their fellow citizens through their flawed practices: they continued to drink the Walkerton water even as the outbreak was unfolding.

Operators can prevent a waterborne disease outbreak if they ensure the following practices are established and followed.

- Operators must understand their water system, including major contamination hazards in relation to the system's barriers against contamination and the capabilities of those barriers for ensuring safe water
- Operators must translate knowledge of their system into operational monitoring parameters that warn of an increase in risk (e.g., rising source water turbidity) or inadequate performance of barriers to contamination (e.g., reduction in chlorine residual or increase in filter effluent turbidity).
- Operators must establish acceptable performance limits for these operational parameters and continuously monitor them for warning signs of abnormal conditions.
- Operators must work with management to anticipate plausible abnormal conditions and plan effective responses well before a serious incident occurs, including appropriate notification of regulatory authorities. Preparedness should support but does not replace the need for thoughtful analysis and problem solving as events unfold.
- Operators must recognize when they are facing a problem that is beyond their understanding or training and call for assistance.
- Operators need to document "near failures" so that lessons can be learned from such close calls.
- Operators' understanding of their system should include recognition of any inherent vulnerability that needs improvement to reduce contamination risks.
- Operators need to be prepared to take ownership of problems and lead efforts to ensure their managers fully understand the existence of problems that must be rectified.

continued on page 6

WALKERTON—5 YEARS LATER *(Continued from page 5)*

Justice O'Connor concluded in his second inquiry report that "Ultimately, the safety of drinking water is protected by effective management systems and operating practices, run by skilled and well-trained staff." Ontario has committed to implementing substantial improvements in the scope and quality of operator training.

The criminal proceedings against the Walkerton operators should be the final controversial chapter in a long nightmare for those involved in the Walkerton disaster. The operators' ultimate sentence comes in knowing that there were things they could have done that would have prevented severe illness and death among Walkerton consumers. No water treatment operator should want to face this kind of life sentence.

—By Steve E. Hruddy and Richard Walker

The Inquiry reports and supporting documents are available at www.attorneygeneral.jus.gov.on.ca/english/about/pubs/walkerton

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WALKERTON'S EFFECTS

With five years passing since the Walkerton, Ontario public water contamination, the question arises: what effect has this had on operators in BC? In 2003 the province of BC passed the Drinking Water Protection Act. Part of this Act is the Drinking Water Protection Regulations which regulate operator certification based on the EOCP system of classification of facilities and certification of operators. In other words, the Regulations designate mandatory requirements for operators of water systems to be certified.

The province of Ontario had a mandatory requirement for water system operators in place since 1993, yet the two Walkerton water operators who were criminally convicted for their actions were certified as operators but had never written an exam. Both operators received their certification through a grandfathering provision. In BC, the EOCP does not have a grandfathering provision. In the past, the EOCP had been requested to institute a grandfathering provision but refused, keeping the requirements for operators to pass a certification exam.

EOCP NEWSLETTER AND WEB SURVEY

Thanks to the more than 90 operators and others who completed and returned the *EOCP Newsletter and Web Survey* recently! All the returned surveys are being reviewed and the next Digest issue will provide the information from the survey.



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CERTIFICATION QUIZ – WATER DISTRIBUTION

These questions are representative of those found in actual certification exams.

1. **The term “aquifer” relates to which one of the following?**
 - A. surface water
 - B. lake
 - C. stream
 - D. groundwater
2. **Which component of a centrifugal pump moves the water?**
 - A. cylinder
 - B. impeller
 - C. shaft
 - D. valve
3. **Check valves are used to**
 - A. permit air to escape from the pipe
 - B. permit flow in only one direction
 - C. regulate velocity
 - D. stop flow in both directions
4. **The principal purpose of an altitude valve on an elevated tank is to**
 - A. control maximum filling level in distribution storage
 - B. maintain constant static head in the distribution system
 - C. maintain uniform flow from elevated storage
 - D. restrict water flow to high-demand areas
5. **Five milligrams per litre equals _____ parts per million.**
 - A. 2.5
 - B. 5.0
 - C. 10
 - D. 50
6. **If the water level in an elevated tank is 100 feet above the ground surface, the pressure at a tap on a line on the ground below the tank will be about**
 - A. 15.0 psi
 - B. 32.5 psi
 - C. 43.5 psi
 - D. 75.0 psi
7. **A major break in a water main can assist the distribution operator to**
 - A. determine the effectiveness of the system's thrust blocks
 - B. rid the system of air pockets
 - C. observe the interior condition of the distribution system's piping
 - D. determine if additional fire hydrants are needed
8. **In general, a pH of treated water below 6.5 indicates**
 - A. high alkalinity
 - B. free chlorine residual greater than 1.0 mg/L
 - C. corrosive water
 - D. high level of total solids
9. **If water flowing in a 6-inch diameter pipe is discharged into a 4-inch diameter pipe, the velocity will**
 - A. remain the same
 - B. increase approximately twice
 - C. decrease approximately twice
 - D. increase four times
10. **Water leaking to the surface after operating an old valve probably is caused by**
 - A. a broken stem
 - B. dried out packing
 - C. plugged weep holes
 - D. incomplete seating
11. **Water hammer is most likely caused by**
 - A. air in the water
 - B. closing a valve too fast
 - C. hardness in the water
 - D. too much water in the reservoir
12. **To repack a buried gate valve, the valve must be**
 - A. removed from service
 - B. fully closed
 - C. of the rising stem type
 - D. fully open
13. **Centrifugal pump parts include**
 - A. diaphragm
 - B. piston
 - C. rotor
 - D. volute
14. **Thrust blocks are installed to**
 - A. boost flexible joints
 - B. boost water pressure
 - C. minimize corrosion
 - D. prevent movement of pipes
15. **A noisy and vibrating gate valve indicates**
 - A. water hammer is occurring
 - B. scaling
 - C. operating nut is loose
 - D. cavitation is happening

(Answers on page 18)

Plant Profile:

White Rock Utilities Limited – Making A Difference

BY CHESTER MERCHANT

The water utility started in the very early 1900's and has grown over time to meet the demands of the increasing population. In 1975 it was purchased by a family in Tsawwassen and has recently been sold again to Edmonton Power Corporation (EPCOR) of Edmonton, Alberta.



Chester Merchant

I came on the scene in 1988 as General Manager to face the many challenges of the day. White Rock Utilities Limited is the largest private water utility serving a municipality west of Brandon, Manitoba. We now provide water to some 20,000 residents of the city by Semiahmoo Bay, including 86 residents and commercials in South Surrey and the Semiahmoo First Nations. The water system is classified by the EOCP as a WD III facility.

There are currently 6 deep water wells, 3 reservoirs and 45 miles of watermain in the ground along with pressure reducing stations, 310 fire hydrants and a total full time staff of 8 people including myself and 1 part time meter reader.

The utility is fully metered and has been for fifty years or more. We do all our own construction and maintenance on the distribution system so the crew has to be well rounded to handle all of the tasks that go with the day to day operation. We have come a long way since those early days.

When I took over the utility we were using the old type accounting machine and ledger cards with an addressograph plate system for the water bills. In June of 1991 we sent out our first Acc Pac computerized water bill. Later in 1991 or early 1992 along with two computer techs, we developed our own computer water billing program and, of course, since 1991 there have been many improvements to the original computer billing system.

The water meters are buried in pits, about 18 inches from the top of the ground to prevent freezing within a concrete box with a small metal lid that the meter reader lifts up after getting down on bended knee to read the consumption on the meter.

Over the past 5 years we have been changing our meter reading system to a touch read system which is much easier on the meter reader who now can throw away those awful knee pads. This touch read changeover process is about halfway complete and should be finished within the next five or six years.

Included in our water meter program is the replacement of



the old water meters. It was determined that the average life span is roughly 15 years. This is currently being reviewed as it is thought that the life span could be in the 20 to 25 year range based on the superior water meters being manufactured. At the present time, however, we are replacing 250 water meters per year on our replacement program.

Over the course of the 17 years I have been here there have been a number of rate hearings. It is interesting to note that the water rates are determined by the Comptroller of Water Rights in Victoria through the rate hearing process. This process is based on the cost of the operation with the input of the water users. The utility many years ago was directed by the comptroller of Water Rights to develop a rate model which has been used over the years to assist in developing and determining a fair rate system for the users.

Among all the other things that had to be updated was the old water tariff which was written in 1929. The water tariff is an operations document that sets out the rules and the terms and conditions of service. I rewrote the water tariff in 1998 along with the help and guidance of a number of individuals working for the Comptroller of Water Rights in Victoria. The new Water Tariff was accepted by the Comptroller of Water Rights and became effective on May 7, 1999 and has been in use ever since.



Outside Pumpstation



Reservoir

In White Rock we pride ourselves on the superior quality of the water. There are no chemicals of any kind added to it. It is pumped up from the deep wells and directly into the distribution system and is completely natural. It is so wonderful to have chlorine free drinking water. Water quality is a great concern and priorities are given to keeping the water distribution system as clean as possible. The whole system is flushed twice per year, once in the spring and once in the fall. Weekly samples are taken for coliform tests. The test sites are chosen by the Fraser Health Authority and the samples are sent to them for testing by the Centre for Disease Control. The utility also takes samples in May of each year for the Canadian Drinking Water Guidelines tests. The tests are carried out by the local laboratories of Cantest Ltd. in Burnaby. We are pleased to say that our tests are consistent and very good.

In addition to all the protection afforded by a diligent sampling program, the utility also has a backflow prevention/cross connection control program in place to prevent any possible contamination from irrigation sprinklers or chemicals used by commercial outlets as dry cleaners and other users within the system.

The utility has an ongoing conservation program in place with information sent out to the users on lawn care and maximizing the wise use of water during the hot, dry periods of summer. We have also promoted low flow toilets and other items like low flow shower heads and other water saving devices for the home. For many years now, we have had an ongoing student educational program with tours of the utility and lots of information about the wise use of water and how we must protect it for future generations.

My vision as the leader of the water utility was to create a working environment that would make the employees excited and happy about coming to work each day. We not only wanted to provide the best possible water for our consumers but to give back to the community by sharing utility property in the form of the parks we built and our community involvement. Each employee was encouraged to share in the vision and through the combined efforts of each of us, we did reach our goal.

The water utility has been a huge part of my life for the past 17 years and I must say that I am as enthusiastic about coming to work each day as I was when I started in 1988. You never know what you will be facing each day!



Inside Pumpstation



Reservoir

RECORD NUMBER OF EXAM SESSIONS

The EOCB provided the 100th certification exam session this year on October 18th in Grand Forks. Eight new small water system operators wrote the small water system exam. This year, 2005 has seen the largest number of exam sessions ever provided by the EOCB. So far, over 800 exams have been written in 2005, in small sessions with 1 operator to the largest session with 102 operators sitting for the exam.

A core function of the EOCB is to provide certification exams to operators. Over the years the EOCB Board has reviewed the option of providing a smaller number of scheduled exam sessions for operators, similar to other provincial operator certification programs. However, each time the EOCB Board has

decided to continue offering exam sessions for operators whenever and wherever possible.

For example, the province of Alberta which oversees operator certification in Alberta offers only 12 exam sessions per year in 10 communities. In BC, the EOCB has provided the 100 separate exam sessions in 27 different communities.

EOCB exam sessions are provided at BCWWA training seminars, the BCWWA Annual Conference, INAC training seminars, at the EOCB office in Burnaby and with EOCB Board Directors. For information on certification exam applications, check the EOCB website www.eocb.org or contact the EOCB office.

PROJECT NEWS

WESTBANK IRRIGATION DISTRICT

The Westbank Irrigation District (WID), located west of Kelowna, has commenced construction of the new Powers Creek



Water Treatment Plant. The project consists of a new water treatment plant and treated water reservoir costing a total of \$18 million. The water treatment plant will use dissolved air flotation (DAF) and filtration to remove dissolved colour and suspended particulate matter; as well as reduce the amount of chlorine needed for disinfection. The plant was designed by Earth Tech Canada Inc. and will be the first DAF plant operating in the Okanagan.

The treatment plant is designed to process 54,000 M³ of water per day. The 8,000 M³ treated water reservoir will provide additional system capacity and increase emergency water storage.

BRITANNIA BEACH EPCOR has nearly completed construction of a new water treatment plant at the old Britannia Mine site south of Squamish. The project has acid rock drainage from the old mine diverted to the new treatment plant, where heavy metals are removed from the water prior to release in Howe Sound. EPCOR is financing the design and construction and will operate the water treatment plant for 20 years. The province of BC will contribute an annual operating fee.

EOCB ON INTERNET 10 YEARS

The EOCB at www.eocb.org has had a presence on the internet now for over 10 years. Our first web page went online in August 1995, with information on the certification program, examination information, job vacancies and a calendar of courses. In the summer of 1995, the program was still named the BC Water and Wastewater Operators Certification Program Society. Our new name came into effect in November 1995.

The web page continues to grow both in content and in use by operators and other interested parties. As part of the EOCB Business Plan, the web page will be providing a more interactive look with some forms and applications available to be filled on-line by operators as well as other information such as sample exam questions. Stay tuned!



Water Treatment Technology Program Update

THOMPSON RIVERS UNIVERSITY



The water treatment technology program will take its first intake of students this fall. In order to ensure the accessible and flexible nature of our program TRU will be offering courses in the program as regular university courses valued at 9 CEU's by the EOCP or as smaller individual 3 CEU modules. This will allow operators options when pursuing their educational goals.

If the interest of the operator is to achieve or maintain EOCP certification and to achieve an academic credential he/she may opt to take the full 9 CEU course. However, operators who may only be interested in achieving the required CEU for EOCP certification may have the option of taking the smaller 3 CEU modules. These smaller 3 CEU modules may be used for transfer credit, at a later date, into the program with Coordinator's approval.

The benefit to the operators of taking the courses in this manner is the practicality in terms of cost and time efficiency and to allow a greater selection of specific training topics. Both full courses and modularized courses will be available through distance education via online (WebCT) and paper form.

The following list represents courses and related modules which will be available approximately October 1, 2005 for the full courses (9 CEU's) and December 1, 2005 for the module versions (3 CEU's).

Operators are advised to contact the EOCP to determine if a specific course is applicable to their particular situation.

WTTP 171	Water Treatment 1 (9 CEU's)
WTTP 005	The Fundamentals of Water Treatment (3 CEU's)
WTTP 006	Basic Principles of Sedimentation and Filtration (3 CEU's)
WTTP 007	Basic Principles of Disinfection and Water Storage (3 CEU's)
WTTP 180	Electrical Fundamentals 1 (9 CEU's)
WTTP 021	Electrical Principles (3 CEU's)
WTTP 022	Testing Electrical Circuits and Safe Work Practices (3 CEU's)
WTTP 023	Basics of Electric Motors and Motor Controls (3 CEU's)
WTTP 185	Water Treatment 2 (9 CEU's)
WTTP 033	Coagulation (3 CEU's)
WTTP 034	pH Control and Water Softening (3 CEU's)
WTTP 035	Oxidation Reactions (3 CEU's)

Cost for each of the above full courses (9 CEU's) = \$550.00

Cost for each of the above modules (3 CEU's) = \$235.00

Plus cost of texts when required.

For course descriptions please access the TRU Water Education and Research Centre website: <http://tru.ca/schs/water/index.html>.



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FLOW-LEVEL-GAS DETECTION-DISINFECTION-TELEMETRY

NEW MEMBERS AND UPGRADES

Congratulations to the following new operators and those operators who have upgraded their certification level.
February 1, 2005 to June 30, 2005

CERT. NO.	NAME	CITY	CERT. NO.	NAME	CITY
5430	Aart, Hans	SWS <i>Vernon, BC</i>	5289	Brownell, Andrew	SWS <i>Forest Grove, BC</i>
4195	Agnew, Anna Maria	MWWT II <i>Richmond, BC</i>	5328	Bruce, Jonathon	WD I <i>Abbotsford, BC</i>
5421	Aitken, Alan	SWS <i>Fairmont Hot Springs</i>	3647	Burgess, Albert	WD I <i>Langley, BC</i>
3527	Alexander, Christopher	WWC I <i>North Vancouver, BC</i>	5393	Burrows, Terry	SWS <i>South Slokan, BC</i>
5376	Alexander, Fred	SWS <i>Louis Creek, BC</i>	5263	Butler, Carl	SWS <i>Hemlock Valley, BC</i>
5267	Allan, Wesley	SWS <i>Kamloops, BC</i>	5352	Cailing, Zachary	SWWS-L <i>Chilliwack, BC</i>
5361	Allen, Ray	SWS <i>Sparwood, BC</i>	5302	Callaghan, Robert	WD I <i>McBride, BC</i>
893	Anderson, Doug	WD III <i>Richmond, BC</i>	5320	Campagna, Randy	WD I <i>Langley, BC</i>
5257	Andrew, Trevor	SWS <i>Chase, BC</i>	5239	Campbell, Ray	SWS <i>Kelowna, BC</i>
5285	Antoine, Chester	SWWS-L <i>Cache Creek, BC</i>	5307	Carew, Albert	SWS <i>Mission, BC</i>
4809	Aracki, Dino	IWWT I <i>Garibaldi Highlands,</i>	4012	Carlson, James	WWC II <i>Prince George, BC</i>
5343	Arishenkoff, Leon	SWS <i>Crescent Valley, BC</i>	683	Carmichael, Brian	WD III <i>North Vancouver, BC</i>
5306	Atchison, Michael	SWS <i>Sayward, BC</i>	3270	Carnduff, Donald	WWC I <i>New Westminster, BC</i>
1190	Austrom, Anne	WD I <i>Vancouver, BC</i>	3332	Carter, Wade	WWC I <i>Powell River, BC</i>
5246	Ayre, Monte	SWS <i>Victoria, BC</i>	3815	Castagna, Marco	CH <i>Surrey, BC</i>
3137	Baird, Kenneth	WT I <i>Delta, BC</i>	5207	Chadwick, John	WD I <i>Duncan, BC</i>
5165	Balogh, Andy	SWWS-M <i>Langley, BC</i>	5208	Challenger, Simon	WD I <i>Maple Ridge, BC</i>
1191	Banman, Mike	WD I <i>Richmond, BC</i>	5270	Charbonneau, Paul	SWS <i>Golden, BC</i>
3559	Barber, Terry	WD II <i>Dawson Creek, BC</i>	5353	Charles, Joanne	SWWS-L <i>Surrey, BC</i>
3111	Barrett, Patrick	WD II <i>Nanaimo, BC</i>	5353	Charles, Joanne	SWS <i>Surrey, BC</i>
5319	Barta, Michael	WD I <i>Trail, BC</i>	5338	Charlie, Roderick	SWS <i>Tofino, BC</i>
5431	Barwick, Steve	SWS <i>Grand Forks, BC</i>	5292	Charlton, Richard	WWC II <i>North Vancouver, BC</i>
4847	Battersby, Gilbert	WWC I <i>Nakusp, BC</i>	5292	Charlton, Richard	WWC I <i>North Vancouver, BC</i>
5268	Beach, Martha	SWS <i>Mara, BC</i>	4106	Christou, Peter	MWWT II <i>North Vancouver, BC</i>
3858	Beebe, Dale	WD I <i>Canyon, BC</i>	3513	Christy, Kenneth	MWWT I <i>Lillooet, BC</i>
5415	Behan, Spencer	WD I <i>Powell River, BC</i>	3438	Chu, Alfred	WT I <i>Coquitlam, BC</i>
3058	Bell, George	WWC II <i>Williams Lake, BC.</i>	4058	Clarke, Shantelle	MWWT II <i>Pemberton, BC</i>
4915	Bellamy, Derek	IWWT II <i>Squamish, BC</i>	5209	Cliff, Bill	WD I <i>Victoria, BC</i>
5301	Bentley, Bruce	WD I <i>Quesnel, BC</i>	3808	Coles, Todd	WT I <i>Kamloops, BC</i>
5299	Benton, Steve	WWC I <i>Langley, BC</i>	5315	Corbeil, Robert	WD I <i>Prince Rupert, BC</i>
3716	Berg, Allan	WT I <i>Hazelton, BC</i>	5315	Corbeil, Robert	WWC I <i>Prince Rupert, BC</i>
5264	Billy, Lilly	SWWS-M <i>Knutsford, BC</i>	5329	Coulthard, Richard	WD I <i>Nanaimo, BC</i>
5228	Bing, Henry	WD I <i>Vancouver, BC</i>	5331	Coumont, Rick	WD I <i>Surrey, BC</i>
792	Bjorgaard, Darryl	MWWT II <i>Thornhill, BC</i>	5438	Cowan, Dennis	SWS <i>Fairmont Hotsprings,</i>
5362	Blunt, Terry	SWS <i>Kitchener, BC</i>	5242	Craig, Rod	WWC II <i>North Vancouver, BC</i>
5167	Bob, Jake	SWWS-L <i>Merritt, BC</i>	5242	Craig, Rod	WWC I <i>North Vancouver, BC</i>
5094	Botwright, Mark	SWWS-M <i>North Vancouver, BC</i>	5321	Crosthwaite, Raymond	WD I <i>Sechelt, BC</i>
4457	Bourne, Ian	SWWS-L <i>Nelson, BC</i>	3319	Crowley, Paul	WD I <i>Cobble Hill, BC</i>
4457	Bourne, Ian	SWWS-M <i>Nelson, BC</i>	1864	Crowshaw, Steven	WD III <i>Port Alberni, BC</i>
2069	Boyd, Glen	WD I <i>Port McNeill, BC</i>	5411	Cumberland, Jamie	OIT WWC <i>Nanaimo, BC</i>
5188	Boyechko, Bob	SWS <i>Galiano Island, BC</i>	3285	Curnow, Greg	WD II <i>Merritt, BC</i>
5422	Brabec, Josef	SWS <i>Edgewater, BC</i>	5248	Curry, Wendell	SWS <i>Malahat, BC</i>
5120	Brach, Jaspal	WD II <i>Richmond, BC</i>	3510	Cusano, Nick	WD III <i>North Vancouver, BC</i>
5269	Bradshaw, Linda	SWS <i>Radium Hot Springs,</i>	1016	Davidson, Ian	WD I <i>Vancouver, BC</i>
4629	Braithwaite, John	WWC II <i>North Vancouver, BC</i>	5271	Dawe, Larry	SWS <i>Field, BC</i>
4333	Brass, John	WWC I <i>Chilliwack, BC</i>	3458	de Brouwer, Michael	MWWT I <i>Harrison Hot Springs</i>
5247	Breese, Trevor	SWS <i>Nanaimo, BC</i>	3192	De Santis, Lino	WD I <i>Vancouver, BC</i>
4316	Brown, Michelle	WD I <i>Burns Lake, BC</i>	3437	Deacon, Daniel	WD III <i>Surrey, BC</i>
4068	Brown, Shaun	WWC I <i>Langley, BC</i>	5288	Dean, Brian	SWS <i>Summerland, BC</i>
5152	Brown, Trevor	OIT WD <i>Maple Ridge, BC</i>	5383	Decker, Mark	SWS <i>Winfield, BC</i>
5300	Browne, Peter	WWC I <i>Coquitlam, BC</i>	5423	Delorme, Gilbert	SWS <i>Canal Flats, BC</i>

NEW MEMBERS AND UPGRADES

Congratulations to the following new operators and those operators who have upgraded their certification level.
February 1, 2005 to June 30, 2005

CERT. NO.	NAME		CITY	CERT. NO.	NAME		CITY
4138	Derrickson, Krista	SWWS-L	<i>Westbank, BC</i>	4400	Fonda, Lester	WD I	<i>Fort St. James, BC</i>
5272	Desaulniers, Celine	SWS	<i>Lone Butte, BC</i>	5391	Fox, Christopher	SWS	<i>New Denver, BC</i>
1932	Desroches, Leo	WWC II	<i>Carmacks, Yukon</i>	5420	Frankum, Dan	SWS	<i>Maple Ridge, BC</i>
1223	DeVuyst, Kerry	WWC II	<i>Dawson Creek, BC</i>	5332	Fraser, Gary	WD I	<i>Port Moody, BC</i>
5189	Dewdney, Geoff	SWS	<i>Cowichan Bay, BC</i>	5192	Friesen, Donald	SWS	<i>North Vancouver, BC</i>
5229	Dhanowa, Dalvinder	WD I	<i>Surrey, BC</i>	909	Froelich, Morris	WD I	<i>Delta, BC</i>
1586	Dhillon, Norm	WD II	<i>Vancouver, BC</i>	5276	Froese, Dennis	SWS	<i>Muncho Lake, BC</i>
4039	Dick, David	SWWS-L	<i>Ashcroft, BC</i>	2096	Fugel, Thomas	WD I	<i>Vernon, BC</i>
1886	Dickinson, Dennis	WD II	<i>Victoria, BC</i>	4769	Funk, Brian	WD II	<i>Burnaby, BC</i>
5211	Dierick, Rudy	WD I	<i>Nanaimo, BC</i>	1563	Galley, Jeffery	WWC II	<i>Chilliwack, BC</i>
3317	Dingwell, Donald	MWWT I	<i>Duncan, BC</i>	5203	Garthwaite, Michael	SWS	<i>Saanichton, BC</i>
5316	Domshy, Allen	WWC I	<i>Abbotsford, BC</i>	4032	Gaudet, Daniel	WT III	<i>Agassiz, BC</i>
5249	Doran, Brad	SWS	<i>Shawnigan Lake, BC</i>	4032	Gaudet, Daniel	MWWT III	<i>Agassiz, BC</i>
5250	Doran, Geoffrey	SWS	<i>Shawnigan Lake, BC</i>	4160	Gehman, Regan	WD II	<i>Cultus Lake, BC</i>
5251	Dorion, Michael	SWS	<i>Black Creek, BC</i>	4102	Geismar, John	WD II	<i>Prince Rupert, BC</i>
3714	Dorman, Donald	WD II	<i>Sidney, BC</i>	4102	Geismar, John	WWC II	<i>Prince Rupert, BC</i>
5356	Doucette, Leonard	SWS	<i>108 Mile Ranch, BC</i>	4131	Gentile, Gerry	WWC I	<i>Richmond, BC</i>
5190	Drader, Neil	SWS	<i>Malahat, BC</i>	1817	George, David	MWWT II	<i>Trail, BC</i>
5377	Dubois, Gilbert	SWS	<i>Armstrong, BC</i>	5210	Gianfranco, D'Antonio	WD I	<i>Victoria, BC</i>
4360	Duke, Lawrence	WWC II	<i>Port Alberni, BC</i>	5193	Gierinder, Michael	SWS	<i>Parksville, BC</i>
4851	Dumont, Luma	SWS	<i>Granisle, BC</i>	1026	Goff, Gary	WD III	<i>Maple Ridge, BC</i>
4777	Dyer, Wayne	MWWT I	<i>Agassiz, BC</i>	5258	Goforth, Keith	SWWS-L	<i>Creston, BC</i>
5212	Dzagan, Todd	WD I	<i>Qualicum Beach, BC</i>	5258	Goforth, Keith	SWS	<i>Creston, BC</i>
5213	Earle, Hayden	WD I	<i>Victoria, BC</i>	4515	Good, Harry	WD I	<i>Kitwanga, BC</i>
4739	Eastman, James	WWC I	<i>150 Mile House, BC</i>	1661	Gosling, Brian	WD I	<i>Sidney, BC</i>
5273	Ebert, Ronald	SWS	<i>Cache Creek, BC</i>	3233	Gosse, Gordon	WD I	<i>Chetwynd, BC</i>
1115	Edge, Brian	WT IV	<i>Penticton, BC</i>	5231	Goyman, Brian	WD I	<i>Richmond, BC</i>
4474	El-Baghdady, John	IWWT II	<i>Vancouver, BC</i>	5215	Granstrom, Greg	WD II	<i>Rossland, BC</i>
5371	Elias, Timothy	SWS	<i>Gray Creek, BC</i>	5215	Granstrom, Greg	WD I	<i>Rossland, BC</i>
3589	Ellendt, Nelson	WWC I	<i>Chilliwack, BC</i>	1587	Grant, Glen	WD II	<i>Delta, BC</i>
727	Ellington, David	WT I	<i>Enderby, BC</i>	3266	Gray, Ronald	WWC I	<i>Coquitlam, BC</i>
5191	Ellison, Robert	SWS	<i>Salt Spring Island, BC</i>	5344	Grayson, Randy	SWS	<i>Fruitvale, BC</i>
5424	Engdahl, Robert	SWS	<i>Edgewater, BC</i>	5140	Green, Ken	SWWS-M	<i>Hope, BC</i>
967	Engelberts, Joe	WWC I	<i>Williams Lake, BC</i>	4225	Greenough, Benjamin	WWC I	<i>Queen Charlotte City</i>
4336	Escudero, Manuel	WD II	<i>North Vancouver, BC</i>	5297	Griko, Brad	WD I	<i>Invermere, BC</i>
4038	Etherington, Todd	WD III	<i>Duncan, BC</i>	5297	Griko, Brad	CH	<i>Invermere, BC</i>
4038	Etherington, Todd	WWC I	<i>Duncan, BC</i>	5297	Griko, Brad	MWWT I	<i>Invermere, BC</i>
5240	Everitt, Gordon	MWWT I	<i>Smithers, BC</i>	5297	Griko, Brad	WWC I	<i>Invermere, BC</i>
5262	Farquhar, Grant	OIT WWT	<i>Kimberley, BC</i>	2057	Gurney, Roger	MWWT II	<i>Midway, BC</i>
5262	Farquhar, Grant	CH	<i>Kimberley, BC</i>	5122	Gutierrez, Philip	WD II	<i>Coquitlam, BC</i>
3268	Fasciglione, Vito	WWC I	<i>Surrey, BC</i>	5194	Hahn, Peter	SWS	<i>Gabriola Island, BC</i>
5274	Fenwick, Robert	SWS	<i>Merritt, BC</i>	4745	Hale, Brian	CH	<i>Qualicum Beach, BC</i>
854	Ferguson, Michael	WWC I	<i>North Vancouver, BC</i>	3460	Hammell, Terence	WWC I	<i>Prince George, BC</i>
5293	Fiehn, Chuck	MWWT I	<i>Maple Ridge, BC</i>	1645	Hamster, Henry	WD II	<i>Victoria, BC</i>
5230	Fiessel, Darwin	WD I	<i>Delta, BC</i>	4112	Hardy, Randy	SWWS-L	<i>Comox, BC</i>
1022	Finlay, Scott	WD II	<i>Kelowna, BC</i>	5287	Harris, Donald	SWS	<i>Clearwater, BC</i>
4107	Finnigan, Darrell	WWC I	<i>Merritt, BC</i>	685	Hartwell, John	WD II	<i>Richmond, BC</i>
5275	Fitzroy, Pam	SWS	<i>Banff, Alberta</i>	5345	Harvey, Steve	SWS	<i>Fruitvale, BC</i>
5330	Florencio, Edgardo	WD I	<i>Kitimat, BC</i>	5419	Hasenbank, Robie	SWS	<i>Gibsons, BC</i>
5214	Flyn, Gary	WD I	<i>Victoria, BC</i>	5216	Hauser, Dale	WD I	<i>Victoria, BC</i>
5339	Flynn, Norman	SWS	<i>Kamloops, BC</i>	5333	Hawryluik, Kristian	WD I	<i>Kelowna, BC</i>

NEW MEMBERS AND UPGRADES

Congratulations to the following new operators and those operators who have upgraded their certification level.
February 1, 2005 to June 30, 2005

CERT. NO.	NAME		CITY	CERT. NO.	NAME		CITY
1851	Hay, Ronald	WD II	<i>Vancouver, BC</i>	5170	Larkin, Keith	WD I	<i>Vancouver, BC</i>
5334	Hecker, Darren	WD I	<i>Maple Ridge, BC</i>	5170	Larkin, Keith	WWC I	<i>Vancouver, BC</i>
4498	Heidt, Dustin	WD II	<i>Port Coquitlam, BC</i>	3699	Larrimore, Wayne	WWC I	<i>Nakusp, BC</i>
3560	Hemstalk, Daniel	WD II	<i>Sechelt, BC</i>	5340	Latremouille, Gary	SWS	<i>Pritchard, BC</i>
1295	Herdsmen, Christopher	WD I	<i>Vancouver, BC</i>	2012	Law, Allan	WT II	<i>Kaslo, BC</i>
5252	Hildering, Peter	SWS	<i>Powell River, BC</i>	5370	Law, Nelson	SWS	<i>Kaslo, BC</i>
3279	Hill, Ian	WT II	<i>Revelstoke, BC</i>	3196	LeBlanc, Paul	WD II	<i>Coquitlam, BC</i>
5232	Ho, Donald	WD I	<i>Richmond, BC</i>	5244	Lee, Jenna	SWS	<i>Vancouver, BC</i>
5195	Hockridge, Robert	SWS	<i>Cobble Hill, BC</i>	1658	Lefebvre, Sean	WD IV	<i>Kelowna, BC</i>
1087	Hogg, Graham	OIT WT	<i>Taylor, BC</i>	5354	Leon, Michael	SWWS-L	<i>Surrey, BC</i>
5322	Holden, Scott	WD I	<i>Gold Bridge, BC</i>	873	Lewis, John	MWWT II	<i>Ladysmith, BC</i>
1759	Horin, Jerry	WD II	<i>Sardis, BC</i>	5286	Lewis, Roger	SWWS-L	<i>Vernon, BC</i>
5296	Hough, Walter	SWS	<i>Quesnel, BC</i>	5384	Ley, Michael	SWS	<i>Oyama, BC</i>
5294	Howe, Ernest	MWWT I	<i>Revelstoke, BC</i>	5308	Lissimore, Kenneth	SWS	<i>Mission, BC</i>
4747	Howie, Thomas	WD II	<i>North Vancouver, BC</i>	5388	Loewen, Robert	SWS	<i>Williams Lake, BC</i>
4747	Howie, Thomas	CH	<i>North Vancouver, BC</i>	3191	Lofgren, Jeffrey	WD I	<i>Maple Ridge, BC</i>
5217	Hurford, Jeff	WD I	<i>Shawnigan Lake, BC</i>	4159	Logan, Rob	WD II	<i>Cultus Lake, BC</i>
1181	Hutchinson, Gerald	WD II	<i>Gold River, BC</i>	5277	Loggie, Robert	SWS	<i>Revelstoke, BC</i>
4332	Ilachtchouk, Nikolai	WD II	<i>Burnaby, BC</i>	5278	Long, Wilbert	SWS	<i>Savona, BC</i>
875	Imrie, Mike	WD III	<i>Grand Forks, BC</i>	3040	Looker, Keith	MWWT I	<i>Ucluelet, BC</i>
4193	Inglis, Lorne	WD I	<i>Maple Ridge, BC</i>	5097	Loverenow, Harry	WD I	<i>Castlegar, BC</i>
1837	Ingram, William	SWS	<i>Vernon, BC</i>	3636	Lucht, Luke	MWWT II	<i>Salmo, BC</i>
5233	Ireland, Scott	WD I	<i>Surrey, BC</i>	4720	Lupichuk, Wayne	WD II	<i>Maple Ridge, BC</i>
5168	Isaac, John	SWWS-L	<i>Merritt, BC</i>	5266	Luton, James	SWS	<i>Kamloops, BC</i>
774	Isbister, Graham	WWC I	<i>Maple Ridge, BC</i>	5303	Macdonald, Arthur	WD I	<i>Prince George, BC</i>
5161	Jacobs, Raymond	SWWS-L	<i>Port Hardy, BC</i>	5261	MacDonald, Michael	WD I	<i>Coquitlam, BC</i>
5405	James, Jesse	SWS	<i>Hope, BC</i>	5342	MacGregor, Laurel	SWS	<i>Maple Ridge, BC</i>
4352	Janssen, William	WD II	<i>Cobble Hill, BC</i>	1156	MacPhail, Donald	WD III	<i>Vancouver, BC</i>
1852	Jenkinson, Doug	WD II	<i>Vancouver, BC</i>	5380	Maderyc, Jan	SWS	<i>Mica Creek, BC</i>
3572	Jensen, Arne	MWWT I	<i>Ucluelet, BC</i>	5409	Makowski, Bernadette	SWWS-L	<i>Fort Nelson, BC</i>
5346	Johnson, Dean	SWS	<i>Trail, BC</i>	5425	Maletta, James	SWS	<i>Cranbrook, BC</i>
1824	Johnson, Kenneth	WWC I	<i>White Rock, BC</i>	4571	Manuel, Dennis	OIT WD	<i>Wells, BC</i>
5218	Johnson, Terry	WD I	<i>Victoria, BC</i>	5426	Manz, Joan	SWS	<i>Invermere, BC</i>
4944	Jones, Leonard	WD I	<i>Victoria, BC</i>	5363	Marcer, Bob	SWS	<i>Elko, BC</i>
3611	Jorgensen, Bruce	WWC I	<i>Maple Ridge, BC</i>	5364	Marcer, Lance	SWS	<i>Elko, BC</i>
5357	Junglas, Sean	SWS	<i>Houston, BC</i>	1564	Marshall, Darren	WD II	<i>Maple Ridge, BC</i>
3998	Jurista, Thomas	WD I	<i>Prince George, BC</i>	4351	Martin, Dexter	WD I	<i>Fort St. James, BC</i>
3275	Kalinczuk, John	MWWT II	<i>Salmon Arm, BC</i>	4858	Martin, Gordon	WD II	<i>Cobble Hill, BC</i>
5163	Kelly, Joe	SWS	<i>Abbotsford, BC</i>	234	Martin, Greg	CH	<i>Kimberley, BC</i>
3340	Kimber, Michael	WD II	<i>Sidney, BC</i>	234	Martin, Greg	MWWT III	<i>Kimberley, BC</i>
5378	Klim, Alice	SWS	<i>Vernon, BC</i>	4480	Marton, Peter	WWC I	<i>North Vancouver, BC</i>
5379	Klim, Walter	SWS	<i>Vernon, BC</i>	5358	Marutt, Darren	SWS	<i>Prince George, BC</i>
1958	Koczur, Joseph	WD II	<i>Chilliwack, BC</i>	4342	Mason, Wesley	WD II	<i>West Vancouver, BC</i>
5347	Kokiw, David	SWS	<i>Trail, BC</i>	3538	Mastandrea, Bert	WWC I	<i>Maple Ridge, BC</i>
4748	Korinetz, Geoff	WWC I	<i>Port Coquitlam, BC</i>	1896	Matias, Joe	WWC I	<i>Merritt, BC</i>
5397	Krahn, Gene	SWS	<i>Grand Forks, BC</i>	5341	Matthias, Mike	SWS	<i>Merritt, BC</i>
376	Kruger, Allan	WWC I	<i>Pender Island, BC</i>	5199	McCook, William	SWS	<i>Fort Ware, BC</i>
376	Kruger, Allan	WT I	<i>Pender Island, BC</i>	1744	McDonald, Charlie	WT II	<i>Saltspring Island, BC</i>
3820	Kryzanowski, Terry	WD I	<i>Prince George, BC</i>	3255	McIlraith, Gil	CH	<i>Vernon, BC</i>
4495	Lainchbury, David	SWWS-L	<i>Fort St. James, BC</i>	3334	McKerr, James	WD III	<i>Comox, BC</i>
3290	Landry, Nelson	WWC I	<i>Williams Lake, BC</i>	5348	McKinnon, Dennis	SWS	<i>Trail, BC</i>

NEW MEMBERS AND UPGRADES

Congratulations to the following new operators and those operators who have upgraded their certification level.
February 1, 2005 to June 30, 2005

CERT. NO.	NAME	CITY	CERT. NO.	NAME	CITY
5198	McKnight, Chris	SWS <i>Klemtu, BC</i>	5282	Poremsky, William	SWS <i>Kelowna, BC</i>
5198	McKnight, Chris	SWWS-L <i>Klemtu, BC</i>	3826	Porterfield, Sarah	WD II <i>Vancouver, BC</i>
1397	McLean, Cid	OIT WT <i>Penticton, BC</i>	3001	Potter, Leonard	MWWT IV <i>Fort Langley, BC</i>
5349	McLean, Donald	SWS <i>Fruitvale, BC</i>	5336	Pouliot, Blain	WD I <i>Port Alberni, BC</i>
4431	McLeod, Ian	WD I <i>Dawson Creek, BC</i>	1557	Praught, Sylvia	WD I <i>Surrey, BC</i>
4391	McMahon, Terry	WD I <i>Duncan, BC</i>	5113	Price, Darryl	WD II <i>Abbotsford, BC</i>
1455	McMillan, Dan	WT I <i>Summerland, BC</i>	5400	Price, Patrick	SWS <i>Rossland, BC</i>
5204	McMullen, Richard	SWS <i>Pender Island, BC</i>	3701	Proulx, Richard	WD I <i>Trail, BC</i>
5385	McRorie, Sandra	SWS <i>Westbank, BC</i>	5196	Purden, Terence	SWS <i>Black Creek, BC</i>
5309	McTaggart, Bruce	SWS <i>Bowen Island, BC</i>	5200	Quon, Kelly	SWS <i>Williams Lake, BC</i>
1461	Mealing, Greg	WT IV <i>Penticton, BC</i>	3389	Ralph, James	WT II <i>Port Hardy, BC</i>
5310	Merinuk, Edward	SWS <i>Mayne Island, BC</i>	5403	Reid, Garney	SWS <i>Waslisla, BC</i>
5234	Merke, Rory	WD I <i>Surrey, BC</i>	4434	Reschke, Edward	WD I <i>Hudson's Hope, BC</i>
1273	Midgley, Allen	WD II <i>Cache Creek, BC</i>	1098	Reynolds, John	MWWT III <i>Sooke, BC</i>
3867	Miller, Carl	WD II <i>Sparwood, BC</i>	4586	Richter, Curtis	WD I <i>Marysville, BC</i>
3202	Miller, Douglas	WWC I <i>Burnaby, BC</i>	5416	Rinaldo, Valter	WD I <i>Vancouver, BC</i>
3982	Miller, Patricia	WT II <i>Sun Peaks, BC</i>	3009	Roberts, James	MWWT II <i>Abbotsford, BC</i>
5404	Moody, Don	SWS <i>Pitt Meadows, BC</i>	5435	Roberts, Peter	SWS <i>Malakwa, BC</i>
5243	Moore, Robert	SWS <i>Ladysmith, BC</i>	5323	Robertson, Les	WD I <i>North Vancouver, BC</i>
5394	Morin, Ted	SWS <i>Castlegar, BC</i>	5401	Robinson, Dennis	SWS <i>Castlegar, BC</i>
5166	Morris, Peter	SWS <i>Hudson's Hope, BC</i>	5428	Robinson, Victor	SWS <i>Fernie, BC</i>
5253	Morrison, Kenneth	SWS <i>Nanaimo, BC</i>	1989	Rose, Terrance	WD I <i>Victoria, BC</i>
5365	Morrissey, Bill	SWS <i>Cranbrook, BC</i>	5219	Ross, Gordon	WD I <i>Kelowna, BC</i>
5265	Mulyk, Hugo	SWS <i>Valemount, BC</i>	5429	Routledge, James	SWS <i>Fairmont, BC</i>
5413	Murray, Wayne	WD I <i>Kimberley, BC</i>	3260	Ruf, Mark	WWC I <i>Port Coquitlam, BC</i>
5413	Murray, Wayne	WWC I <i>Kimberley, BC</i>	5381	Rushton, Bernie	SWS <i>Mara, BC</i>
5366	Murtack, Myles	SWS <i>Cranbrook, BC</i>	5235	Russell, Shaney	WD I <i>Richmond, BC</i>
1435	Myles, Ross	WWC I <i>North Vancouver, BC</i>	5283	Ryan, Catherine	SWS <i>Vernon, BC</i>
1435	Myles, Ross	WWC II <i>North Vancouver, BC</i>	5311	Saffin, Brian	SWS <i>Mission, BC</i>
5123	Narayan, Vincent	WD II <i>Surrey, BC</i>	4404	Saharchuk, Dennis	WD I <i>Fort St. James, BC</i>
5427	Neitzel, Donald	SWS <i>Fairmont Hot Springs</i>	1409	Sahota, Gopal	WD II <i>Surrey, BC</i>
5279	Nestor, Keith	SWS <i>Chase, BC</i>	1153	Salsbury, Scott	SWWS-L <i>Abbotsford, BC</i>
3121	Nitschke, Bruce	WD I <i>North Delta, BC</i>	5389	Sam, Howard	SWS <i>Fort St. James, BC</i>
4146	Nolan, Kenneth	WD I <i>North Vancouver, BC</i>	3596	Sam, Kenny	SWWS-L <i>Fort St. James, BC</i>
5372	Nygaard, Marvin	SWS <i>Nelson, BC</i>	4209	Sampson, Robert	WD I <i>Hazelton, BC</i>
4051	Nystoruk, Kenneth	SWWS-L <i>Barriere, BC</i>	4063	Sandberg, Larry	IWWT II <i>Nanaimo, BC</i>
5280	O'Connor, Casey	SWS <i>Kamloops, BC</i>	978	Sanregret, Randy	WD I <i>Prince George, BC</i>
5295	Oliver, Ronald	MWWT I <i>Revelstoke, BC</i>	3261	Santorelli, Gino	WWC I <i>Vancouver, BC</i>
5254	Olsten, Jim	SWS <i>Cobble Hill, BC</i>	5284	Saunders, Baird	SWS <i>Tumbler Ridge, BC</i>
1122	Osborne, Ray	WD II <i>Whitehorse, YT</i>	5298	Saunders, Bill	OIT WD <i>Valemount, BC</i>
3730	Oscarson, David	MWWT I <i>Kimberley, BC</i>	5312	Saunders, Elaine	SWS <i>100 Mile House, BC</i>
3521	Otsig, Neil	WT I <i>Heffly Creek, BC</i>	5171	Saunier, Michael	WD I <i>Parksville, BC</i>
5281	Ott, Roy	SWS <i>Vernon, BC</i>	5317	Sawyer, Dean	WWC I <i>Port Alberni, BC</i>
3818	Ouellette, Marc	WWC I <i>Prince George, BC</i>	5414	Schile, David	WWC I <i>Chilliwack, BC</i>
5407	Palmer, Brian	SWS <i>Lister, BC</i>	3602	Schneider, Harvey	MWWT III <i>Richmond, BC</i>
3114	Parker, David	WWC II <i>Crofton, BC</i>	3817	Schroeder, Sigmund	WD II <i>Abbotsford, BC</i>
3715	Peeke-Vout, George	WD II <i>Victoria, BC</i>	1913	Sciarretta, Paolo	WWC I <i>Burnaby, BC</i>
5359	Peters, Rainer	SWS <i>Lac La Hache, BC</i>	5417	Scott, Alan	WD I <i>Fernie, BC</i>
5402	Peters, Richard	SWS <i>Chilliwack, BC</i>	1762	Scott, Douglas	WD II <i>Surrey, BC</i>
5367	Polacik, Gord	SWS <i>Sparwood, BC</i>	5395	Scott, Ross	SWS <i>Castlegar, BC</i>
5399	Popoff, Gerry	SWS <i>Grand Forks, BC</i>	5368	Sedlmeir, Klaus	SWS <i>Boswell, BC</i>

NEW MEMBERS AND UPGRADES

Congratulations to the following new operators and those operators who have upgraded their certification level.
February 1, 2005 to June 30, 2005

CERT. NO.	NAME	CITY	CERT. NO.	NAME	CITY
5236	Semple, Tyler	WD I <i>Richmond, BC</i>	5223	Thompson, Randy	WD I <i>Victoria, BC</i>
1595	Shea, Sean	WD II <i>Tumbler Ridge, BC</i>	4350	Toews, Rudy	WD II <i>Yarrow, BC</i>
5255	Shearer, Nick	SWS <i>Nanoose Bay, BC</i>	4517	Tomma, James	CH <i>Chase, BC</i>
5220	Shepherd, Ryan	CH <i>North Vancouver, BC</i>	5202	Tout, Bruce	SWS <i>North Vancouver, BC</i>
1879	Sherbrook, Danny	WD II <i>Victoria, BC</i>	5398	Trainer, Adam	SWS <i>Grand Forks, BC</i>
4013	Sherwood, Dean	WD II <i>North Vancouver, BC</i>	5237	Tremblay, Gail	WD I <i>Richmond, BC</i>
4370	Shiel, Gilbert	SWWS-L <i>Shalath, BC</i>	4583	Tricker, Alonzo	WWC I <i>Chetwynd, BC</i>
5304	Short, Brian	WD I <i>Prince George, BC</i>	1412	Trinkl, Mark	WD II <i>Vancouver, BC</i>
4499	Sladen, Trevor	SWS <i>Whistler, BC</i>	4607	Trottier, Kevin	WWC II <i>Kelowna, BC</i>
5318	Slater, Thomas	MWWT I <i>Duncan, BC</i>	5241	Turnbull, James	MWWT I <i>Penticton, BC</i>
1498	Smith, Gary	CH <i>Fraser Lake, BC</i>	5241	Turnbull, James	WT I <i>Penticton, BC</i>
3258	Smith, Patrick	WD II <i>Victoria, BC</i>	4766	Urrutia, Alberto	WD I <i>Burnaby, BC</i>
3787	Smith, Randall	WD I <i>Greenwood, BC</i>	4766	Urrutia, Alberto	CH <i>Burnaby, BC</i>
5256	Smith, Terry	SWS <i>Ucluelet, BC</i>	5197	Vanveen, Robert	SWS <i>Sooke, BC</i>
5418	Smith, William	WD I <i>Vernon, BC</i>	4042	Vaughan, Bruce	SWWS-L <i>Lillooet, BC</i>
5360	Smolarek, Sabine	SWS <i>Lone Butte, BC</i>	5396	Vickers, Terry	SWS <i>Castlegar, BC</i>
4098	Snell, Kenneth	WT II <i>Kitimat, BC</i>	1656	Villa, Roy	WD II <i>Victoria, BC</i>
1052	Soanes, Howard	WD I <i>North Vancouver, BC</i>	1951	Villeneuve, John	WT II <i>Fort Nelson, BC</i>
1893	Sophonow, Robert	WWC II <i>Victoria, BC</i>	958	Vurzinger, Joe	MWWT IV <i>Chilliwack, BC</i>
1367	Soros, Alf	WT II <i>Vernon, BC</i>	5375	Wakelin, Lyle	SWS <i>Gray Creek, BC</i>
5290	Southgate, Anthony	SWS <i>Prince George, BC</i>	5305	Wall, Darrell	WD I <i>Prince George, BC</i>
5245	Speck, William	SWWS-L <i>Alert Bay, BC</i>	5337	Wallace, David	SWS <i>Port Hardy, BC</i>
5324	Spence, Larry	WD I <i>Royston, BC</i>	5106	Watkins, Danny	WD I <i>Westbank, BC</i>
5350	Staff, Peter	SWS <i>Fruitvale, BC</i>	941	Webb, Douglas	WD III <i>Delta, BC</i>
1523	Stafford, Carey	WD II <i>Maple Ridge, BC</i>	3959	Weber, Christopher	WD II <i>Delta, BC</i>
4759	Stanley, Richard	WWC II <i>Delta, BC</i>	3591	Welsh, Mitchell	WD II <i>Dawson Creek, BC</i>
4759	Stanley, Richard	WD I <i>Delta, BC</i>	3587	Welz, David	WD II <i>Parksville, BC</i>
4909	Stark, Gordon	WD I <i>Hudson's Hope, BC</i>	5325	Wescott, William	WD I <i>Warfield, BC</i>
1961	Startup, Jason	SWS <i>Fruitvale, BC</i>	5355	White, Daniel	SWWS-L <i>Waglisla, BC</i>
5392	Steenhoff, Anthony	SWS <i>New Denver, BC</i>	3209	Whiting, Alan	WWC I <i>Langley, BC</i>
5313	Stelter, Don	SWS <i>Langley, BC</i>	5173	Whitty, Shawn	OIT WD <i>Penticton, BC</i>
1180	Stepaniuk, Ronald	WD II <i>Victoria, BC</i>	5224	Williams, Patrick	WD I <i>Duncan, BC</i>
5291	Stephen, Don	SWS <i>Prince George, BC</i>	5326	Williams, Patrick	WD I <i>Maple Ridge, BC</i>
5387	Stephenson, Michael	SWS <i>Crescent Valley, BC</i>	1243	Williams, Peter	WD I <i>Prince George, BC</i>
5155	Stevens, Ronald	WWC II <i>Surrey, BC</i>	4531	Wilson, Ryan	WD I <i>Elkford, BC</i>
5369	Stevenson, Blair	SWS <i>Cranbrook, BC</i>	4531	Wilson, Ryan	WWC I <i>Elkford, BC</i>
4348	Stevenson, Leslie	WD II <i>Surrey, BC</i>	3211	Wirsz, Dale	WWC I <i>Surrey, BC</i>
5382	Stordahl, James	SWS <i>Mica Creek, BC</i>	5206	Wishlaw, James	MWWT I <i>Brentwood Bay, BC</i>
5221	Stott, Bradley	WD I <i>Victoria, BC</i>	5406	Wood, Shane	WT III <i>Abbotsford, BC</i>
5351	Stroud, Robert	SWS <i>Trail, BC</i>	5225	Woodward, Jonathan	WD I <i>Victoria, BC</i>
5222	Sumberac, Adriano	WD I <i>Victoria, BC</i>	5226	Worley, Colin	WD I <i>North Vancouver, BC</i>
5169	Sundquist, Jon	WD I <i>Burnaby, BC</i>	3681	Worthington, James	WD I <i>Sorrento, BC</i>
5373	Sutherland, Gordon	SWS <i>Nelson, BC</i>	5259	Yarama, Maryann	SWS <i>Chase, BC</i>
5374	Sutherland, Ken	SWS <i>Nelson, BC</i>	5327	Young, Darryl	WD I <i>Surrey, BC</i>
4093	Sweeney, Trevor	WD I <i>Sechelt, BC</i>	3743	Young, Gordon	CH <i>Granisle, BC</i>
4183	Taverner, Andrew	MWWT II <i>Vancouver, BC</i>	4057	Young, Kevin	MWWT II <i>Powell River, BC</i>
5205	Taylor, Sara	SWS <i>Powell River, BC</i>	5410	Zaal, John	OIT WD <i>Logan Lake, BC</i>
5201	Thomas, Joseph	SWS <i>Williams Lake, BC</i>	3328	Ziefflie, Brent	WD II <i>Mission, BC</i>
5390	Thomas, Norman	SWS <i>Fort St. James, BC</i>			

NEWLY CLASSIFIED OR UPDATED FACILITIES

Facility No	Facility Name	February 1, 2005 to June 30, 2005	Classification / Level	City/Province
1027	683751 B.C. Ltd. - Saratoga Resorts Small Wastewater System		SWWS-M	<i>Scotch Creek, BC</i>
190	Airport Sewage Treatment Facility		MWWT II	<i>Port Hardy, BC</i>
1072	Alcan Water Distribution System		WD II	<i>Kitimat, BC</i>
1095	Arrow Creek Water Treatment Plant		WT II	<i>Creston, BC</i>
1107	Aspen Mobile Estates Small Water System		SWS	<i>Chetwynd, BC</i>
1105	Bedwell Bay Small Wastewater System		SWWS-M	<i>Anmore, BC</i>
1081	Bell Acres Small Water System		SWS	<i>Chilliwack, BC</i>
1018	Belmont Secondary School Wastewater Treatment Facility		MWWT I	<i>Victoria, BC</i>
1123	Blue Mountain Packers Ltd. Small Wastewater System		SWWS-L	<i>Salmon Arm, BC</i>
515	Brentwood College Wastewater Treatment Facility		MWWT II	<i>Mill Bay, BC</i>
1073	Bridal Falls Water Distribution System		WD I	<i>Chilliwack, BC</i>
1091	Britton Creek Rest Area Small Water System		SWS	<i>Britton Creek, BC</i>
1114	Bus Repair Shop Small Water System		SWS	<i>Sparwood, BC</i>
1111	Casa Loma Small Water System		SWS	<i>Kelowna, BC</i>
1030	Cedar Heights Water Distribution System		WD II	<i>Sorrento, BC</i>
1082	Cheam Small Water System		SWS	<i>Rosedale, BC</i>
676	Cherry Creek Waterworks District		WD II	<i>Port Alberni, BC</i>
1186	Citrus Wynd Wastewater Treatment Plant		SWWS-M	<i>West Vancouver, BC</i>
1100	City of Greenwood Water Distribution System		WD I	<i>Greenwood, BC</i>
136	City of Prince Rupert Water Distribution System		WD III	<i>Prince Rupert, BC</i>
1003	City of Whitehorse Water Distribution System		WD IV	<i>Whitehorse, YT</i>
1089	Coquihalla Rest Stop North Bound Small Water System		SWS	<i>Merritt, BC</i>
1118	Cultus Lake Golf Club Small Water System		SWS	<i>Cultus Lake, BC</i>
295	Curran Road Wastewater Treatment Facility		MWWT II	<i>Halfmoon Bay, BC</i>
1083	Deroche Small Water System		SWS	<i>Deroche, BC</i>
28	District of Chilliwack Pollution Control		MWWT III	<i>Chilliwack, BC</i>
1190	District of Houston Water Distribution		WD II	<i>Houston, BC</i>
1079	Dogwood Valley Small Water System		SWS	<i>Hope, BC</i>
1032	Eagle Bay Estates Small Water System		SWS	<i>Eagle Bay, BC</i>
1080	East Cultus Small Water System		SWS	<i>Cultus Lake, BC</i>
1016	Edward Milne Community School Wastewater Treatment Facility		MWWT I	<i>Sooke, BC</i>
1128	Eighteen Pastures Small Water System		SWS	<i>Mission, BC</i>
1086	Fairhaven Ministries Association Small Wastewater System		SWWS-M	<i>Vernon, BC</i>
1031	Falkland Water Distribution System		WD I	<i>Falkland, BC</i>
1108	Family, Youth, Children Cntr. Small Water System		SWS	<i>Mission, BC</i>
1025	Fintry Utilities Ltd. Small Water System		SWS	<i>Vernon, BC</i>
1110	Gateway Falls Estates Small Wastewater System		SWWS-M	<i>Lee Creek, BC</i>
520	Genelle Improvement District Distribution System		WD I	<i>Genelle, BC</i>
1102	Grant's Landing Marina Small Water System		SWS	<i>Langley, BC</i>
1120	Grassy Plains School Lagoons		SWWS-L	<i>Grassy Plains, BC</i>
1112	Harmer Small Water System		SWS	<i>Sparwood, BC</i>
995	Hazelnut Grove Small Water System		SWS	<i>Agassiz, BC</i>
1119	Hemlock Valley Small Water System		SWS	<i>Hemlock Valley, BC</i>
812	Highland Valley Copper Water Treatment Plant		WT I	<i>Logan Lake, BC</i>
1078	Hope Air Park Small Water System		SWS	<i>Hope, BC</i>
1130	Hummingbird Resort Small Water System		SWS	<i>Mara, BC</i>
1	Iona Island Wastewater Treatment Facility		MWWT III	<i>Richmond, BC</i>
1019	John Muir Elementary School Wastewater Treatment Facility		MWWT I	<i>Sooke, BC</i>
1020	Journey Middle School Wastewater Treatment Facility		MWWT I	<i>Sooke, BC</i>
1087	Kamloops Center For Water Quality Water Treatment Facility		WT IV	<i>Kamloops, BC</i>
1092	Kootenay Lake Lodge & Resort Small Water System		SWS	<i>Boswell, BC</i>
1015	Lakewood Elementary School Wastewater Treatment Facility		MWWT I	<i>Victoria, BC</i>

NEWLY CLASSIFIED OR UPDATED FACILITIES

Facility No	Facility Name	February 1, 2005 to June 30, 2005	Classification / Level	City/Province
1033	Lambourne Small Wastewater System		SWWS-M	<i>Cowichan Bay, BC</i>
1121	Last Chance Waterworks Small Water System		SWS	<i>Langley, BC</i>
294	Lee Bay Wastewater Treatment Facility		MWWT I	<i>Irvines Landing, BC</i>
1029	Leisure Valley Holiday Park Water Utility Co.		SWS	<i>Lindell Beach, BC</i>
298	Lillooet Wastewater Treatment Facility		MWWT II	<i>Lillooet, BC</i>
1101	Lower Nicola Waterworks		WD I	<i>Lower Nicola, BC</i>
1085	MacArthur Heights Waterworks Small Water System		SWS	<i>Blind Bay, BC</i>
1116	Machine Rebuild Shop Small Water System		SWS	<i>Sparwood, BC</i>
1021	Metchosin Elementary School Wastewater Treatment Facility		MWWT I	<i>Metchosin, BC</i>
307	Midway Effluent Discharge Facility		MWWT II	<i>Midway, BC</i>
1125	Millers Sunshine Valley Estates Society Small Water System		SWS	<i>Merritt, BC</i>
1075	Morris Valley Bulk Small Water System		SWS	<i>Agassiz, BC</i>
997	Mountain / Kent Institution Water Distribution System		WD II	<i>Agassiz, BC</i>
1077	North Bend Small Water System		SWS	<i>North Bend, BC</i>
1113	Plant Potable Small Water System		SWS	<i>Sparwood, BC</i>
781	Prospera Mall Small Water System		SWS	<i>Agassiz, BC</i>
1131	Rivershore Estates Strata K353 Small Wastewater System		SWWS-L	<i>Kamloops, BC</i>
1124	Rivershore Utilities Strata K535 Small Water System		SWS	<i>Kamloops, BC</i>
1115	Road Crew Shop/Maingate Small Water System		SWS	<i>Sparwood, BC</i>
1106	Salish Water Users Small Water System		SWS	<i>Belcarra, BC</i>
1094	Sandspit Community Small Water System		SWS	<i>Sandspit, BC</i>
1026	Saratoga Waterworks Small Water System		SWS	<i>Scotch Creek, BC</i>
297	Secret Cove/Jolly Roger Wastewater Treatment Facility		MWWT I	<i>Sechelt, BC</i>
185	Skidegate Band Water Distribution System		WD II	<i>Prince Rupert, BC</i>
1024	Snaw-naw-as Wastewater Treatment Facility		MWWT II	<i>Lantzville, BC</i>
1017	Sooke Elementary School Wastewater Treatment Facility		MWWT I	<i>Sooke, BC</i>
1103	Sorrento Waterworks District		WD II	<i>Sorrento, BC</i>
296	Square Bay Wastewater Treatment Facility		MWWT I	<i>Halfmoon Bay, BC</i>
510	Sun Peaks Wastewater Treatment Facility		MWWT III	<i>Sun Peaks, BC</i>
1028	Sunnybrae Bible Camp Small Wastewater System		SWWS-M	<i>Tappen, BC</i>
1129	Tall Timber Golf Course Small Water System		SWS	<i>Langley, BC</i>
1127	Teck Cominco Water Distribution System		WD I	<i>Trail, BC</i>
1096	Thetis Island Community Strata VIS 5168 Small Wastewater System		SWWS-L	<i>Thetis Island, BC</i>
1104	Three Nations Small Water System		SWS	<i>Burns Lake, BC</i>
1099	Timber Ridge Water Distribution System		WD II	<i>Windermere, BC</i>
1023	Town of Comox Water Distribution System		WD II	<i>Comox, BC</i>
1185	Town of Sidney Wastewater Collection		WWC II	<i>Sidney, BC</i>
1093	UBC Utility Water Distribution System		WD III	<i>Vancouver, BC</i>
359	Village of Ashcroft Water Distribution System		WD II	<i>Ashcroft, BC</i>
387	Village of Fraser Lake Wastewater Collection System		WWC I	<i>Fraser Lake, BC</i>
1126	Village of Lytton Small Water System		SWS	<i>Lytton, BC</i>
1109	Village of New Denver Water Distribution System		WD I	<i>New Denver, BC</i>
1084	Village of Sayward Small Water System		SWS	<i>Sayward, BC</i>
1117	Warehouse 50 Small Water System		SWS	<i>Sparwood, BC</i>
1074	West Popkum Water Distribution System		WD I	<i>Popkum, BC</i>
1098	Windermere Water Distribution System		WD II	<i>Windermere, BC</i>
1022	Wishart Elementary School Wastewater Treatment Facility		MWWT I	<i>Victoria, BC</i>
518	Woodcreek Wastewater Treatment Facility		MWWT I	<i>Sechelt, BC</i>
1076	Yale Small Water System		SWS	<i>Yale, BC</i>
293	YMCA Wastewater Treatment Facility		MWWT I	<i>Langdale, BC</i>
1090	Zopkios Ridge Small Water System		SWS	<i>Merritt, BC</i>

Certification Quiz Answers: 1. D 2. B 3. B 4. A 5. B 6. C 7. C 8. C 9. B 10. B 11. B 12. D 13. D 14. D 15. D



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UPCOMING EVENTS

TRAINING OPPORTUNITIES

EVENT / COURSE	DATE	LOCATION
Wastewater Treatment IV	Oct 24 - 28	Vancouver
Water Treatment II	Oct 24 - 28	Vancouver
Small Water Systems	Oct 31 - Nov 1	Vernon
Small Water Systems	Oct 31 - Nov 1	Penticton
Water Distribution II	Oct 31 - Nov 4	Nanaimo
Wastewater Collection I	Oct 31 - Nov 4	Kelowna
Water Distribution I	Oct 31 - Nov 4	Kelowna
Wastewater Treatment I	Oct 31 - Nov 4	Kelowna
Small Wastewater Systems	Nov 2 - Nov 3	Kelowna
Small Water Systems	Nov 8 - 9	Kamloops
Supervisory Skills	Nov 14 - 15	Victoria
Cross Connection Control	Nov 21 - 26	Kitimat
Water Treatment I	Nov 28 - Dec 2	Burnaby
Wastewater Collection III	Dec 5 - 9	Burnaby

Please phone the BCWWA at 604 433 4389 for information on the above courses or check their website at www.bcwwa.org.

EOCP CERTIFICATION EXAMINATIONS

Operators wishing to write certification exams must apply to the EOCP by written application complete with job description no later than two weeks prior to the exam session.
Exam fees are payable to the EOCP office before the time of writing and may be paid by Visa or Mastercard.
Exam application forms can be downloaded from the EOCP web site at www.eocp.org.

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