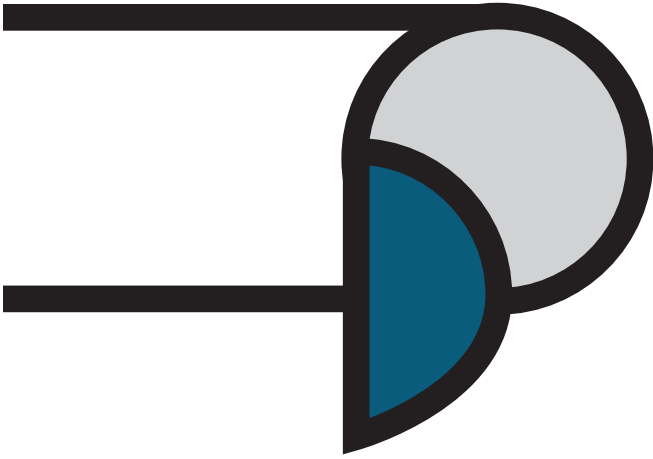


UBC WORKSHOP
MAY 11-15



1998 CERTIFICATION BOARD	THINK SAFETY	6
ELECTION CALL FOR NOMINATIONS 1	EMPLOYMENT OPPORTUNITY	7
EDITOR'S NOTES	NEW MEMBERS AND UPGRADES	8
BOARD ELECTIONS/BOARD BUSINESS	MEMBERSHIPS TO BE LAPSED	10
PLANT PROFILE	PROFESSIONAL SERVICES	11
MORE ANAGRAMS/WORD GAME WINNERS	UPCOMING EVENTS	12



BRITISH COLUMBIA OPERATORS DIGEST

MARCH 1998 NUMBER 94

PLANT PROFILE: TOWN OF SMITHERS WATER SUPPLY

The town of Smithers' water supply consists of three separate deep wells which supply drinking water to approximately 5,700 residents. The total pumping rate from the three wells is 150 litres/second or about 13 million litres/day. There is only one pressure zone. Water is pumped to the distribution system and is stored in two separate reservoirs, which hold 900 M³ and 4600 M³ of water. The larger reservoir is an above ground concrete tank and the smaller reservoir is an underground concrete tank.

The operation of the wells is controlled with digital communication between the reservoirs and the wells over telephone lines. Each station has an alarm panel, a PLC and a modem. An alarm and monitoring station is located at the Public Works Yard for monitoring the system. This recently installed system can easily be upgraded to a full SCADA system in the future.

(continued on page 4)



Winter view of Smithers' Water Pumphouse - Plant Profile continued on page 4.

1998 CERTIFICATION BOARD ELECTION CALL FOR NOMINATIONS



Environmental Operators Certification Program

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

Don Gare
Box 20121
Smithers, B.C. V0J 3P0

PHONE: (250) 847-1646 FAX: (250) 847-4155

e-mail: dgare@bulkley.net

Internet: <http://www.bulkley.net/~dgare/index.html>

Changes of address, annual dues, exam applications, as well as general inquiries about the program should be addressed to:

Ms. Barbara Striegler
Executive Assistant, EOCP
101 - 224 West 8th Ave.,
Vancouver, B.C. V5Y 1N5

Phone: (604) 874-4784 Fax: (604) 874-4794

e-mail: eocp@bc.sympatico.ca

Business card sized advertisement space is available at \$50.00 per issue or \$175.00 for four issues. GST and PST included. For other sized advertisements, please contact the Editor.

The Environmental Operators Certification Program is a charter member of the Association of Boards of Certification, and is a Registered Society with over 1,200 active members.

Design & Layout by:



Olive Design



Printed on Recycled Paper

Editor's Notes

Spring is here and so are the two main events of the year for operator training. First, the BCWWA Annual Conference is being held in Whistler once again, from April 26th to the 29th. The program has many sessions of interest to both water and wastewater operators. There are sessions describing treatment plant upgrades in Whistler, Salmon Arm, French Creek and Prince George. Operators are co-presenters for these sessions as well. On the water side there are sessions on conservation strategies, cold climate issues, and chlorination problems. Other sessions operators may be interested in include odor control at wastewater treatment plants, inflow and infiltration, and biosolids. Once again, there will be a safety competition, and an exam session.

The UBC Operator School runs from May 11th to 15th. There is a wide variety of courses, from full five day courses to one day courses. These are listed on the back page of the *Digest*.

Every May is election time for the EOCP Board. Directors are elected for a two year term; with four Directors elected one year and five Directors the following year. This year the election is for five Directors. Operators will receive ballots in late April. Please take the few minutes to mark your ballot and mail it back to the EOCP office.

Once again, information on operators, plant profiles, questions or comments on the Certification Program are welcome.



1998 Certification Board Elections

This year's Nominating Committee members are Don Gare from Smithers and Michael Harrison from Castlegar.

There are five positions on the Board to be filled by three operators, one government representative, and one education liaison. The Nominating Committee is pleased to present the following slate of candidates:

OPERATORS:

Leo Albrecht Eric Jackson Dave McLean

GOVERNMENT REPRESENTATIVE:

Bernie Taekema

EDUCATION LIAISON:

Kevin Ramsay

The nominating Committee invites further nominations from the membership. Each nomination shall be supported by a minimum of three (3) certified operators and shall be submitted no later than

April 9, 1998 by mail to:

EOCP Nominating Committee

101 - 224 West 8th Avenue,
Vancouver, B.C. V5Y 1N5
or by fax to 604.874.4794

Ballots will be mailed to operators on April 17, 1998.

Completed ballots shall be mailed to:

EOCP

101 - 224 West 8th Avenue,
Vancouver, B.C. V5Y 1N5

The deadline for receipt of ballots is May 8, 1998.

Certification Board Business

*Highlights from the Meeting of the EOCP Board of Directors,
February 2, 1998 in Vancouver.*

- The **Treasurer's Report** was received. The 1997 **Revenue** was **\$110,370** and the **Expenses** were **\$102,772**. **Total assets** were **\$62,103**.
- The Chairman presented his report stating that a meeting had taken place between the BCWWA executive and the EOCP Chairman. Both associations are keen to work with each other to maintain training and certification. The BCWWA is working on developing **additional training for small systems and industrial wastewater treatment**. The Auditor General is doing a report on water management in the province which may help our cause for mandatory water treatment and distribution. The joint committee of BCWWA and EOCP will continue their pitch toward this end. We are receiving a lot of inquiries from pulp mill wastewater treatment operators wishing to write municipal certification exams.
- Bernie Taekema reported that many small wastewater treatment facilities are making inquiries regarding plant classification and operator certification.

[Continued on page 4]

- PIPELINE SWABBING AND POLY PIGGING
- CROSS CONNECTION SURVEYS
- BACKFLOW PREVENTERS
- LEAK DETECTION
- LEAK REPAIRS
- FLOW TESTS



WESTCOAST HYDRANT SERVICES LTD.

12260 Vickers Way, Richmond, B.C. V6V 1H9
Bus: (604) 270-9236 Fax: (604) 270-3851

PLANT PROFILE: TOWN OF SMITHERS WATER SUPPLY

(continued from page 1)

The water quality of the three wells complies with the Canadian Drinking Water Standards, except for manganese which exceeds the acceptable limit of 0.05ppm. The Town does not chlorinate the water supply except for a four week period each fall when the complete distribution system is flushed. The Town does add fluoride.

The Town of Smithers water system is classified as a Level I system by the EOCP. The system is operated and maintained by Errol Franson, who also maintains the Town's Level I wastewater treatment plant.

Certification Board Business

[Continued from page 3]



- There was continued discussion regarding the appointment of an **Industrial Director to the Board**. The Constitution would have to be revised to include on the Board a Director from Industrial Management plus the addition of a Director that is an industrial operator as the majority of Board members must be operators. **The Board would like to hear operators' opinions on the subject. Operators can call, fax or email their opinions to the Board Office.**
- The nominations for the **Vic Terry Award** closed March 2, and the Board will make its recommendation to the BCWWA, for presentation at the BCWWA Conference in Whistler.
- **DRC Time Forms** will be sent out with annual renewal letters to each wastewater treatment facility. These forms will record how DRC is allocated in each plant, e.g. how many employees earn DRC and how many shifts are run in the plant, etc.
- The Board resolved that as per ABC guidelines, for **Class III and IV operators**, a maximum of 90 CEU's of post-high school education may be substituted for 2 years experience; however, the applicant must still have 1 year of DRC experience.
- The Board will have all **certificates sealed** with the EOCP logo and name, to ensure that the certificate is authentic and original.
- The Board resolved that the EOCP will pay \$800 (1/3 of costs - BCWWA to pay 2/3 costs) to Dave McLean to promote operator training and certification; as a **pilot project** in the areas of northern Vancouver Island and the Kootenays.

Sore Mama Rang - We Eat Straw

[MORE ANAGRAMS - WASTEWATER]

Here is another anagram word game.

Each group of letters when rearranged, spells out an object or term found in a wastewater treatment plant. Each answer is one word except where shown. Fax your answers to the Editor at (250) 847-4155 before May 1.

Three winners will be drawn from the correct replies. Winners will receive an EOCP cap.

- | | |
|--|------------------------------------|
| 1. Ice Boar - _____ | 14. Croon It Mum - _____ |
| 2. Soon Gal - _____ | 15. Stir Edge - _____ |
| 3. Met Ten Rat - _____ | 16. A Bare Coin - _____ |
| 4. Adult Care Digest [2 words] - _____ | 17. Lone Ham - _____ |
| 5. I Bet A Car - _____ | 18. Slap Me - _____ |
| 6. Fair Relic - _____ | 19. Go In Car - _____ |
| 7. Royal or Bat - _____ | 20. Fun Fleet - _____ |
| 8. Crab Sneer [2 words] - _____ | 21. A Work Shed - _____ |
| 9. An Idiot Ox - _____ | 22. A Spent Hag - _____ |
| 10. Cool Firm - _____ | 23. Spec It - _____ |
| 11. Turn Inset - _____ | 24. Align Trench [2 words] - _____ |
| 12. Insane Omitted - _____ | 25. Rose Candy - _____ |
| 13. Rip Army - _____ | 26. Let In Fun - _____ |

Word Game Winners

Answers from the December issue - Suits Ice (US Cities).

The three winners, randomly drawn from the correct replies, were:

Jo Wrench from *West Vancouver Waterworks*, **Leigh Hodgetts** from *CRD Water, Victoria*, and **Sheryl, Al and Mike** from *The Westside Treatment Plant, Kelowna*. Each receives the coveted EOCP hat.

- | | | |
|--|--|--|
| 1. All ads - <i>Dallas</i> | 10. Celled Van - <i>Cleveland</i> | 19. Tried To - <i>Detroit</i> |
| 2. No Legs Sale - <i>Los Angeles</i> | 11. Take Silly Cat - <i>Salt Lake City</i> | 20. Broiled Meat - <i>Baltimore</i> |
| 3. Dial In Pianos - <i>Indianapolis</i> | 12. Its Soul - <i>St. Louis</i> | 21. Darn Plot - <i>Portland</i> |
| 4. Bank Is Far - <i>Fairbanks</i> | 13. Cast Kin Say - <i>Kansas City</i> | 22. Change Oar - <i>Anchorage</i> |
| 5. Lets Eat - <i>Seattle</i> | 14. Hen Villas - <i>Nashville</i> | 23. In Cacti Inn - <i>Cincinnati</i> |
| 6. Worn Key - <i>New York</i> | 15. No Real News - <i>New Orleans</i> | 24. Hip Oxen - <i>Phoenix</i> |
| 7. No Shout - <i>Houston</i> | 16. Puts Bright - <i>Pittsburgh</i> | 25. Fort Hard - <i>Hartford</i> |
| 8. Coins Fan Cars - <i>San Francisco</i> | 17. Diagnose - <i>San Diego</i> | 26. Pea Hill Aphid - <i>Philadelphia</i> |
| 9. Salvages - <i>Las Vegas</i> | 18. This Nag Won - <i>Washington</i> | |

THINK SAFETY

NEW WCB OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

On April 15, 1998, British Columbia will have a new set of workplace safety standards: the *Occupational Health and Safety Regulation*. Produced over six years, the new standards - 4,000 regulations in total - represent an historical achievement for the employer and worker representatives who participated in their development.

Representatives of government agencies, suppliers and building owners, as well as WCB health and safety professionals, also sat on the 33 committees and working groups established to address industry-and hazard-specific topics. Virtually every B.C. regulation on workplace health and safety was reviewed, and the WCB solicited opinions from the working committees and public on all changes. In the end, it is estimated that more than 100,000 person-hours of development work went into producing the new regulations.

The importance of consultation to a successful outcome cannot be underestimated, says **McGinn**, WCB vice-president of Prevention and head of regulation review. "This approach is time-consuming and requires a lot of patience, but it's critical that employers and workers participate. They are most familiar with the issues and how to solve them efficiently. And their involvement ensures that all interests - in safety, practicability, and cost - are brought forward."

John Weir, director of occupational safety and health for the B.C. Federation of Labour, agrees. As coordinator for the worker caucus, he saw "high value in drawing in such practical advice, and in sharing perspectives between those working with regulations day to day and those from the Board with technical expertise."

Kent Hillman of B.C. Hydro's Corporate Safety Division sat on the occupational hygiene committee as an employer representative. "Yes, the process was slow," he says, "but it was entirely necessary and we have a better product because of it."

"Making regulations is making decisions," Hillman explains, "and for that you need accuracy and acceptance. The only way you can assure getting both is by having stakeholders at the table."

Smaller committees, such as the one Hillman sat on, were the backbone of the review, according to **Mike Arbogast**, vice-president, consulting services, of the B.C. Health Employer Association. He served as coordinator of the employer caucus and, like Weir, participated in all six years of the review.

"The industry committees involved people much closer to the business at hand and, because of that, they worked well. These working groups are what should be built on and used more regularly," Arbogast says.

In the end, employers and workers agreed to virtually all regulation proposals. The body of regulations and approximately 100 outstanding proposals - including those concerning the exposure limit for formaldehyde and servicing records for mobile equipment - were referred to the WCB Panel of Administrators for decision.

Now that the regulations have passed into law, much more work lies ahead. Of the 4,000 regulations, almost 1,000 are either entirely new or represent a changed standard of compliance. To help employers and workers understand which of the new regulations affect them and how, the WCB Prevention Division is planning a variety of support services, including information sessions around the province and new or revised publications and videos. A series of guides geared to small business is in the works as well.

The WCB is also developing policy and operating instructions that will guide Board officers in their application of the regulations starting April 15, 1998. A one-year phase-in period for compliance will follow for most regulations.

- from *Prevention at Work*, November/December 1997



WASTEWATER TREATMENT PLANT OPERATOR - ANNACIS ISLAND & LULU ISLAND PLANTS

EMPLOYMENT OPPORTUNITY

The Greater Vancouver Regional District (www.gvrd.bc.ca) is upgrading two of its regional wastewater treatment plants to secondary treatment as part of the District's commitment to "The Livable Region".

The Annacis Island positions involve 12 - hour shiftwork; the Lulu Island positions are based on a 40 - hour, 5 - day week. Expect plenty of variety as you will be relied upon to: operate, monitor and maintain all phases of the wastewater treatment facility and related support systems, operate and assist in the maintenance/repair of a wide range of process and ancillary equipment, perform and interpret wastewater process sampling and lab testing, and undertake general maintenance throughout the plant.

Primary requirements include: post secondary courses in wastewater treatment and electrical and mechanical technology,

BC EOCIP Class III WWTP Operators certification or a recognized reciprocal equivalent in good standing, a proven willingness to undertake additional training and progress towards Class IV certification, 4 or more years progressively responsible, directly-related experience, and the ability to instruct and provide direction to junior staff as well as to use job-related computer applications.

Please forward your resume to: Personnel Office, Greater Vancouver Regional District, 4330 Kingsway, Burnaby, B.C. V5H 4G8. While we greatly appreciate all the replies we receive, regrettably only those selected for interviews will be contacted.

If you are a Level III Operator and would like further information, please contact Brian Hystad (Operations Supervisor, Annacis Island WWTP) at 520.0947.

LAPSED MEMBERSHIP DUES

The following people have not paid their annual dues since 1995. If they wish to remain in the program and keep their certificates valid, they must pay their annual dues from 1996, a total of \$155.00 by May 31, 1998


NAME

Andrews, Jack	Green, Matthew	Lotay, Pyara	Regush, Patrick
Ast, Dennis	Greencorn, J.	MacMillan, Kirk	Richards, David
Banman, Mike	Hafemann, Ron	Massey, Nigel	Ross, Kathryn
Beaumont, Robert	Hanratty, Jeff	McKay, Bud	Schuss, Ed
Blake, Robert	Harris, Ted	Merry, Andrew	Setticasi, Filippo
Boyd, Jay	Hayes, Patrick	Moody, Guy	Sra, Gurdev
Brown, Jack	Herdsmen, Christopher	Morris, Gordon	Stewart, Roderick
Burnham, Kevin	Humble, Doug	Mullen, Michael	Tennock, Craig
Cebuliak, Ken	Hume, Rick	Myles, Ross	Thompson, Gary
Connolley, Gil	Ireland, Terry	Myrnko, James	Trinkl, Mark
Cyr, Janine	Jaeger, Dave	Nixon, William	Warnke, Todd
Dick, Rob	Kinakin, Mickey	Ost, Horst	Watts, Robert
Fitzpatrick, Mike	Laslo, Mark	Peters, Clayton	Weite, Robert
Gascon, Gerald	Leger, Michael	Phillips, Rodrick	Winters, Rick
Gavin, Michael	Leggo, Curtis	Price, Gerry	Young, Bruce

NEW MEMBERS AND UPGRADES

CERT. NO.	NAME	CITY	CERT. NO.	NAME	CITY
1947	Armstrong, Timothy	WD, I <i>Nanaimo, B.C.</i>	1973	Castellano, Domenic	WWT, I <i>Nakusp, B.C.</i>
1429	Assel, Gary	WWT, I <i>Nakusp, B.C.</i>	1964	Caulton, Mark	WD, I <i>Garibaldi Highlands, B.C.</i>
1325	Balfour, Scott	CH <i>Trail, B.C.</i>	1478	Chadwick, Eliot	WWT, II <i>Brackendale, B.C.</i>
1325	Balfour, Scott	WWT, I <i>Trail, B.C.</i>	1977	Chapman, Anthony	WWC, I <i>Maple Ridge, B.C.</i>
1832	Ballance, Bradley	OIT, WWT <i>Kamloops, B.C.</i>	1720	Chapman, Dean	WD, I <i>Grand Forks, B.C.</i>
1621	Barnes, Ward	WWC, II <i>Nanaimo, B.C.</i>	1579	Clerke, Micheal	WWC, I <i>Vernon, B.C.</i>
1351	Barth, Barry	WWC, II <i>Nanaimo, B.C.</i>	1364	Clifford, James	WD, I <i>Hazelton, B.C.</i>
1674	Benere, David	WD, II <i>Parksville, B.C.</i>	1911	Cobb, John	WWC, I <i>Maple Ridge, B.C.</i>
1934	Berscheid, Darcy	OIT, WWT <i>Cobble Hill, B.C.</i>	1569	Cooper, Victor	WWC, III <i>Nanaimo, B.C.</i>
1228	Bewley, Graham	WWC, II <i>Victoria, B.C.</i>	1953	Cosgrove, Darren	WWC, I <i>Nanaimo, B.C.</i>
699	Bignell, Ron	CH <i>Trail, B.C.</i>	1955	Cote, Pascale	OIT, WWT <i>Richmond, B.C.</i>
1381	Bogetti, Brian	WWC, II <i>Kamloops, B.C.</i>	1957	Craig, David	WD, I <i>Logan Lake, B.C.</i>
1278	Bonner, Steve	WD, II <i>Port Moody, B.C.</i>	1980	Crosthwaite, Ian	WWT, I <i>Kelowna, B.C.</i>
1101	Bradshaw, Glen	OIT, WWT <i>Richmond, B.C.</i>	1786	Danyluk, Gerry	CH <i>Kamloops, B.C.</i>
1465	Bregoliss, Mark	WWC, II <i>Kamloops, B.C.</i>	1952	de Jong, Harold	WT, I <i>Fort Nelson, B.C.</i>
1976	Brisbin, Larry	WWC, I <i>Maple Ridge, B.C.</i>	1972	DeCrane, Kim	WWT, I <i>Port Alice, B.C.</i>
1369	Broomfield, Robin	WD, I <i>Prince Rupert, B.C.</i>	1932	Desroches, Leo	WWT, I <i>Carmacks, Yukon Terr.</i>
1941	Brown, Christopher	WWT, I <i>Kelowna, B.C.</i>	1714	Douglas, James	WWT, II <i>Maple Ridge, B.C.</i>
1860	Brown, Owen	WWT, I <i>Prince George, B.C.</i>	1815	Drapeau, Denis	WWC, I <i>Fort St. John, B.C.</i>
1011	Cameron, Charlie	WWT, III <i>Kelowna, B.C.</i>	1938	Drews, Glenn	WWT, I <i>Kelowna, B.C.</i>
1928	Camilli, Robert	OIT, WWC <i>Watson Lake, Yukon Terr.</i>	1967	Eckert, Dennis	WWC, I <i>Victoria, B.C.</i>
1928	Camilli, Robert	OIT, WD <i>Watson Lake, Yukon Terr.</i>	727	Ellington, David	CH <i>Enderby, B.C.</i>
1536	Carter, Brian	WWC, I <i>Port Coquitlam, B.C.</i>	1933	Emery, Kent	WD, I <i>Abbotsford, B.C.</i>
1973	Castellano, Domenic	WD, I <i>Nakusp, B.C.</i>	967	Engelberts, Joe	WD, II <i>Williams Lake, B.C.</i>


[continued on page 9]



Charles Armstrong, R.P.Bio.
Lab Manager

Northern Laboratories Ltd.
Water & Environmental Testing

Member C.A.E.A.L. Tel: (250) 627-1906
545 Hays Cove Circle 1-800-990-9522
Prince Rupert, B.C. V8J 2C3 Fax: (250) 627-8214

Badger Meter
Capital Controls
Gastech
Milltronics
Panalarm

Thos. W. MacKay & Son Ltd.
9205 Shaughnessy St., Vancouver, B.C. V6P 6R5
Fax (604) 324-6566 Ph (604) 324-6561



**YOUR PARTNER
IN MUNICIPAL
WATER
HANDLING.**



**PUMPS
MIXERS
CONTROLS**

FLYGT
74 Glacier Street
Coquitlam, B. C. V3K 5Y9
Tel.: (604) 941-6664 Fax: (604) 941-3659

DISTRIBUTORS:
Duncan Electric Motors Ltd., Vancouver Island, (604) 746-5312
North Coast Rentals (1984) Ltd., Prince Rupert, (604) 624-5273
Industrial Sales, Whitehorse, (403) 668-2550

NEW MEMBERS AND UPGRADES

[continued from page 8]

CERT. NO.	NAME	CITY	CERT. NO.	NAME	CITY
1948	Ferguson, Stan	WD, I <i>Errington, B.C.</i>	1935	Minns, Dennis	WWC, I <i>Richmond, B.C.</i>
1939	Fjellner, Conny	OIT, WWT <i>Vancouver, B.C.</i>	1819	Monsen, Kenneth	WWC, I <i>Telkwa, B.C.</i>
1979	Focht, Robert	WWT, I <i>Quesnel, B.C.</i>	1962	Moroz, Bruce	WD, I <i>Houston, B.C.</i>
1956	Ford, Robert	WD, I <i>Logan Lake, B.C.</i>	1905	Mufford, Michael	WD, I <i>Kamloops, B.C.</i>
890	Frese, Hartmut	WWT, IV <i>Salmon Arm, B.C.</i>	1718	Murphy, Michael	WWT, I <i>Pitt Meadows, B.C.</i>
1324	Gerein, Keith	WWT, III <i>Winfield, B.C.</i>	1143	Needham, Richard	WWC, I <i>Oliver, B.C.</i>
1978	Gold, David	WWT, I <i>Naramata, B.C.</i>	1549	Nicholls, Paul	WWT, III <i>Port Coquitlam, B.C.</i>
1978	Gold, David	WD, I <i>Naramata, B.C.</i>	1903	Nickurak, Brian	WWT, III <i>Kaleden, B.C.</i>
1798	Gowing, Greg	WT, II <i>Penticton, B.C.</i>	1930	Nielsen, Douglas	WWT, I <i>Port Alice, B.C.</i>
1931	Greenwood, James	WWT, I <i>Whitehorse, Yukon Terr.</i>	1930	Nielsen, Douglas	WWT, II <i>Port Alice, B.C.</i>
1205	Grieve, Glen	WWT, I <i>Fruitvale, B.C.</i>	747	Nugent, E.	WWC, III <i>Duncan, B.C.</i>
1710	Hall, Brent	WWT, II <i>Kelowna, B.C.</i>	1439	Pacclone, Mimmo	WWC, II <i>West Vancouver, B.C.</i>
1975	Harbour, Jim	WWC, I <i>Maple Ridge, B.C.</i>	752	Patterson, Allan	WWC, I <i>Kelowna, B.C.</i>
1731	Harvey, Bill	WD, I <i>Whistler, B.C.</i>	1512	Polles, Robert	WWC, II <i>Port Alberni, B.C.</i>
1410	Healey, Mike	WD, II <i>Mission, B.C.</i>	1509	Primeau, Anne	WWT, II <i>Agassiz, B.C.</i>
1207	Held, Seigried	OIT, WWT <i>Oliver, B.C.</i>	1216	Radford, Chris	WWT, II <i>Golden, B.C.</i>
892	Hermanson, Eric	WWT, III <i>Summerland, B.C.</i>	1943	Raincock, Grant	WWT, I <i>Penticton, B.C.</i>
1828	Hill, George	WWT, I <i>Victoria, B.C.</i>	1571	Rasmuson, Gerry	OIT/WWT <i>Salmon Arm, B.C.</i>
1463	Hughes, Vince	WWT, II <i>Westbank, B.C.</i>	1936	Reid, Andrew	WWT, I <i>Summerland, B.C.</i>
1460	Humes, David	WWC, II <i>Westbank, B.C.</i>	1675	Richmond, Colby	WWC, II <i>Nanaimo, B.C.</i>
1255	Hurst, John	OIT, WWT <i>Clearbrook, B.C.</i>	1311	Roberts, Michael	WWC, II <i>North Vancouver, B.C.</i>
1084	Ice-ton, Mark	WWC, II <i>Whitehorse, B.C.</i>	1338	Robinson, Dean	WWC, II <i>Nanaimo, B.C.</i>
1084	Ice-ton, Mark	WWT, I <i>Whitehorse, B.C.</i>	1467	Robinson, James	WWT, II <i>Port Alice, B.C.</i>
875	Imrie, Mike	WWT, II <i>Grand Forks, B.C.</i>	1940	Robinson, Leanne	OIT/WWT <i>Penticton, B.C.</i>
875	Imrie, Mike	CH <i>Grand Forks, B.C.</i>	1217	Rooke, Steven	WD, II <i>Abbotsford, B.C.</i>
1244	Kamstra, Stuart	WD, II <i>Prince George, B.C.</i>	1077	Sarabun, Byron	WWT, II <i>Fernie, B.C.</i>
1244	Kamstra, Stuart	WWC, I <i>Prince George, B.C.</i>	1974	Sayewich, Douglas	WWT, I <i>Heffley Creek, B.C.</i>
1959	Kellinghusen, Juergen	WD, I <i>Courtenay, B.C.</i>	1949	Scott, James	WD, I <i>Duncan, B.C.</i>
1968	Kelly, Scott	WWC, I <i>Sooke, B.C.</i>	1667	Skidmore, Dan	WWC, I <i>100 Mile House, B.C.</i>
1904	Kennedy, Del	WD, I <i>Kamloops, B.C.</i>	1377	Smith, Robert	WD, II <i>Kamloops, B.C.</i>
1874	Kersche, Josef	WWC, I <i>Pender Island, B.C.</i>	1114	Solomon, Don	WWT, I <i>Whitehorse, YT</i>
1965	Kier, Kundan	WD, I <i>Burnaby, B.C.</i>	1367	Soros, Alf	CH <i>Vernon, B.C.</i>
1958	Koczkur, Joseph	OIT, WWT <i>Sardis, B.C.</i>	1966	Soros, Ross	WWC, I <i>Maple Ridge, B.C.</i>
1349	Kosy, Donald	WWT, III <i>Kelowna, B.C.</i>	1679	Stachoski, Dale	WWC, I <i>Mission, B.C.</i>
1597	Lannan, Robert	WD, II <i>Saltspring Island, B.C.</i>	1961	Startup, Jason	WD, I <i>Fruitvale, B.C.</i>
1971	Larsen, Davin	WWT, I <i>Enderby, B.C.</i>	1914	Stewart, David	WWT, I <i>Burns Lake, B.C.</i>
1298	Lee, Derek	WD, II <i>Abbotsford, B.C.</i>	1685	Swaile, Kevin	WWT, II <i>Fort Nelson, B.C.</i>
1658	Lefebvre, Sean	WWT, II <i>Port Hardy, B.C.</i>	1950	Taylor, Raymond	WD, I <i>Duncan, B.C.</i>
1960	Little, Randy	WD, I <i>Smithers, B.C.</i>	1970	Temple, Doug	WWT, I <i>Fernie, B.C.</i>
1361	Long, Steve	WD, II <i>Abbotsford, B.C.</i>	1617	Thorburn, Brian	WWT, II <i>Port Hardy, B.C.</i>
1214	Massingham, Kevin	WWC, II <i>Duncan, B.C.</i>	673	Tooms, Roger	WWT, I <i>Terrace, B.C.</i>
753	McAuley, Brian	WWT, II <i>Kelowna, B.C.</i>	1521	Trapp, Tim	WD, I <i>Mackenzie, B.C.</i>
1929	McCulloch, Robert	OIT, WWC <i>Watson Lake, Yukon Terr.</i>	1323	Valentim, Frank	WWT, III <i>Westbank, B.C.</i>
1929	McCulloch, Robert	OIT, WD <i>Watson Lake, Yukon Terr.</i>	1719	Vanderhook, Magdale	CH <i>Garibaldi Highlands, B.C.</i>
1784	McDonald, Ken	WWC, II <i>Nanaimo, B.C.</i>	1719	Vanderhook, Magdale	WWT, II <i>Garibaldi Highlands, B.C.</i>
1944	McLellan, Sean	WWT, I <i>North Vancouver, B.C.</i>	1942	Villaneuva, Arvel	WWT, I <i>Vancouver, B.C.</i>
922	McLeod, Kevin	WWT, II <i>Terrace, B.C.</i>	1951	Villeneuve, John	WD, I <i>Fort Nelson, B.C.</i>
922	McLeod, Kevin	WD, II <i>Terrace, B.C.</i>	1963	Weistra, Johnny	WWC, I <i>Maple Ridge, B.C.</i>
1455	McMillan, Dan	WWT, II <i>Naramata, B.C.</i>	134	White, James	WWT, III <i>Kelowna, B.C.</i>
1926	McNaughton, James	WWC, I <i>Dawson City, Yukon Terr.</i>	842	Wieler, Jay	WD, II <i>Abbotsford, B.C.</i>
1926	McNaughton, James	WD, I <i>Dawson City, Yukon Terr.</i>	1969	Wilms, Earl	WWC, I <i>Kamloops, B.C.</i>
1927	McRae, Allen	WWC, I <i>Dawson City, Yukon Terr.</i>	1937	Wyatt, Robert	OIT/WWT <i>Surrey, B.C.</i>
1927	McRae, Allen	WD, I <i>Dawson City, Yukon Terr.</i>	1144	Wyman, Mike	WWT, III <i>Kelowna, B.C.</i>
1461	Mealing, Greg	WT, I <i>Penticton, B.C.</i>			

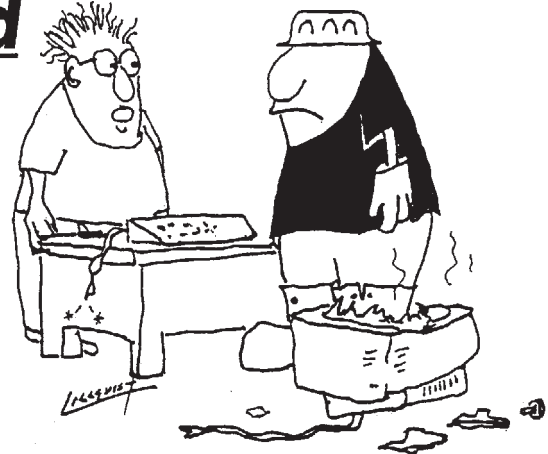
FOR SALE

Used Sewage Treatment Package Plant - 40,000 I.G.P.D. Rotating Biological Contactor complete with 2 chain drives, 2 shafts with media, 2 steel troughs and extras including 4 submersible pumps.

Used Influent Rotating Drum Screen - Design flow, 900 G.P.M. - Single speed, single phase motor

Price negotiable - for more information, contact Denys Gage at: 250.339.5231 or 250.339.2801

Sid



I guess I should explain 'boot it'.

OPERATOR TIPS AVAILABLE ONLINE

A new Web site, "Tips and Ideas for Water and Wastewater Operators," is located at <http://members.aol.com/tipsideas/index.htm>.

The tips, which are voluntarily contributed by operators, are organized into the following sections: collections systems, lift stations, preliminary treatment, clarifiers, solids handling, secondary treatment, disinfection and chemical handling, maintenance tips, laboratory, sampling, and safety.

- Operators Forum, January 1998

Jelcon

PROCESS EQUIPMENT SPECIALTIES LTD.

P.O. Box 799, 5752 Nickerson Road, Sechelt, B.C. V0N 3A0
Facsimile Line: (604) 885-2900 Telephone: (604) 885-2956

JWC ENVIRONMENTAL

MUFFIN MONSTER™ Sewage & Sludge Grinders
CHANNEL MONSTER (combination rotating screen & grinder)

RODNEY HUNT COMPANY, WATER CONTROL EQUIPMENT

- Environmental Analysis
- Field Sampling Services
- Hazardous Waste
- Air & Water Quality
- Pesticides
- Drug Testing

Comprehensive Analytical Services

CanTest Ltd.
1523 W 3rd Ave.
Vancouver, B.C.
V6J 1J8
Fax 604-731-2386
Tel 604-734-7278
1-800-665-8568

CANTEST

Accredited for specific tests by CAEAL & SCC

MEETING THE CHALLENGE FOR OVER FIFTY YEARS



- o Aeration Blowers o Air Diffusers
- o Chopper Pumps o Screening o Odour Control
- o Ozone/Ultraviolet Disinfection
- o Water & Wastewater Treatment Equipment

SANITHERM ENGINEERING LIMITED

431 MOUNTAIN HIGHWAY, SUITE 4
NORTH VANCOUVER, B.C., CANADA V7J 2L1
PHONE (604) 986-9188 FAX (604) 986-5377

Web Site: www.sanitherm.com E-mail: saneng@direct.ca



B.C. Manufacturers of
**GATE VALVES
FIRE HYDRANTS
FITTINGS**



**Terminal City
IRON WORKS LTD.**

1909 Franklin Street, Vancouver, B.C. V5L 1R1 • FAX (604) 253-6365
Phone (604) 253-7525



SPRING CALENDAR

BCWWA ANNUAL CONFERENCE

April 26 - 29, Whistler, B.C.

Operator Exams on April 28, 8:00 a.m. - 12:00 noon

For information or registration:
BCWWA Office, phone [604] 540.0111 or fax [604] 540.4077

BCWWA UBC OPERATORS SCHOOL

Water Distribution	May 11 - 15
Water Treatment	May 11 - 15
Wastewater Collection	May 11 - 15
Wastewater Treatment	May 11 - 15
Chlorination	May 11 - 15
Cross Connection	May 11 - 15
Safety for Water/Sewer Operators	May 12 - 13
Small Wastewater Systems	May 12 - 13
Small Water Systems	May 14 - 15
Water Quality	May 12
Emergency Spill Response	May 11
Plan Reading and Pipe Locating	May 13
New WCB Regulations	May 14
Basic Math for Operators	May 14

For information or registration: BCWWA Office, phone [604] 540.0111 or fax [604] 540.4077

EOCP ANNUAL GENERAL MEETING - May 11, 1998 at UBC