

ALBERTA



UTILITY OPERATOR

NEWS LETTER

SPRING / SUMMER 2000 - NUMBER TWO

FEATURE FACILITY: City of Grande Prairie Wastewater Treatment Facility



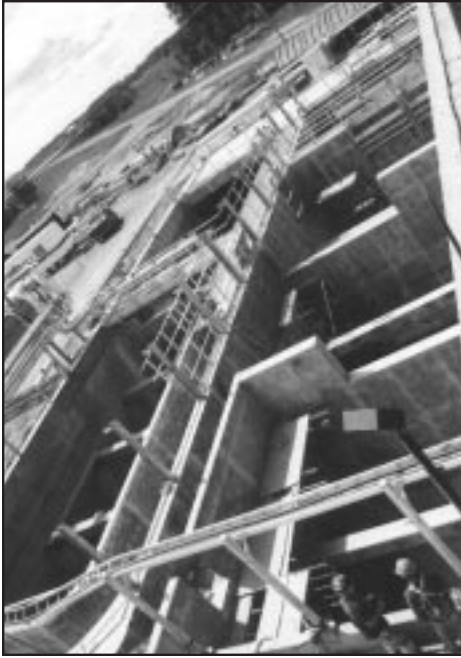
The City of Grande Prairie is a major hub of the north west part of Alberta. It is a service centre for the area as well as home to forestry, oil & gas and other industries. Rapid growth has increased the loading to the wastewater treatment facilities to the point that increased capacity and updated equipment are currently being phased in. Current upgrading has included flow equalization, solids handling, activated sludge treatment, autothermal thermophilic aerobic digestors (ATAD) and a biofilter.

The facility is located next to the water treatment plant approximately two kilometers south of the city. Current design average daily wastewater flow is 18.2 mL/d and peak daily flow design is 44.4 mL/d. Current organic and solids loading is nearly double the design.

Raw wastewater flows by gravity from the city through a flume type ultrasonic monitoring chamber prior to entering the Archimedes screw pumps. The measured flow is used to control the flow equalization system. From the screw pumps the wastewater is discharged to the aerated grit tanks. An open channel "Jelcon Auger Monster" grinds up grit and non-organic material which is then removed by a 1.5 hp auger on a timer system. The existing mechanical bar screen has been retained as a backup system. During normal operation effluent from the headworks then enters the two 1155 m³ rectangular primary clarifiers where settleable solids are removed. During storm events the 39-ML flow equaliza-



GRANDE PRAIRIE WASTEWATER TREATMENT FACILITIES



NEW ACTIVATED SLUDGE TANKS (BNR)

tion tanks are used to eliminate the excessive peak flows. Ferric chloride is added prior to the primary clarifiers to fix sulfides and reduce odours.

Effluent from the primary clarifiers flows to the new activated sludge tanks where organic loading and

nutrients are reduced. Primary sludge and scum are pumped to the ATADs. The activated sludge effluent then flows to the 24 rotating biological contactors (RBCs) which further reduce organic



DIFFUSER SYSTEM ACTIVATED SLUDGE TANK

and nutrient levels. The RBCs consist of four banks of six shafts. Each shaft is 7.6 m long and the media is 3.9 m in diameter. The RBCs are air driven and contain either 9,200 m² or 13,800 m² (surface area) of media each. Hoffman centrifugal blowers supply air and each RBC unit is enclosed with a fibreglass cover.

Effluent from the RBCs flows to the two 1810 m³ secondary clarifiers where stabilized solid material is removed. Secondary sludge from the clarifiers is pumped to the ATADs for further treatment. Secondary treated effluent then flows to the lagoon wet well where it is pumped (four 50-hp centrifugals) to the polishing pond. Polishing pond effluent is discharged to the Wapiti River via three 40 hp split case Allis Chalmers centrifugal pumps.

The sludge treatment facility consists of a 500 m³ holding tank and three 593 m³ Autothermal Thermophillic Aerobic digestors. The sludge is continuously aerated and mixed at +55 to 60°C for six to eight days. Six foam cutters in each digester control foam. Vapour from the digestors (a previous source of complaint) is run through a vent scrubber system prior to being treated in a biofilter. The biofilter consists of a bed of wood chips in a controlled humidity and pH environment.



COVERED BIOFILTER

Digested sludge is dewatered in a belt type filter press. For the last few years the dewatered digested sludge has been applied to local farmland. With the new sludge treatment system and new proposed sludge centrifuge, the future product will likely be used as landfill cover material.

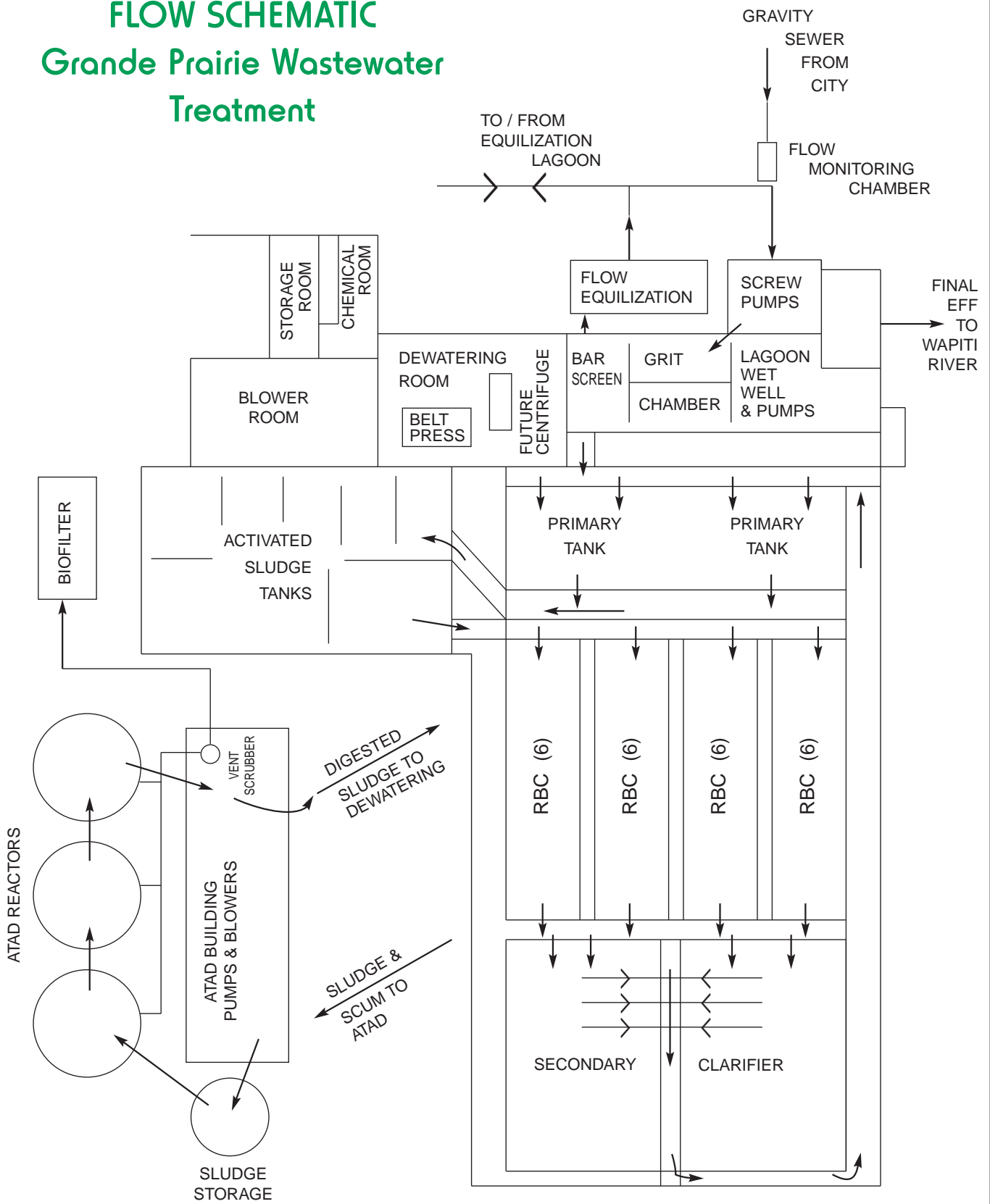


POLISHING POND

The Grande Prairie wastewater treatment facility is currently staffed by 8 operators covering 24 hours per day. Operators of the wastewater facilities are also cross-trained and certified to operate the water treatment facilities. Thanks to Mr. Lynne Coulter, Treatment Operations Supervisor and the operators at the wastewater facility for allowing us to feature their system.

FLOW SCHEMATIC

Grande Prairie Wastewater Treatment



PERSONAL PROFILE

GEORGE MAIR

Municipal District of Opportunity No. 17



GEORGE MAIR

George Mair is the Construction Technician for the Municipal District of Opportunity in Wabasca, Alberta. George was born and raised in Swan River, Manitoba. When he finished school at age 17, he moved with his oldest brother to Alberta. He obtained work initially, with a water and sewer company in Saskatchewan and stayed in the water and sewer industry until 1981. At that time he was successful in obtaining the job as Town Foreman of Sylvan Lake. He remained there (in charge of all utilities) for eleven years. Always one to take on new challenges, George accepted a position as Utilities Manager for the City of Whitehorse, Yukon. He enjoyed his experience in the north and frost factors of 16 feet created some serious challenges.

After a few years in Whitehorse, George successfully applied in a competition for the job of Construction Technician for the MD in Wabasca. The move back to Alberta also allowed him to be closer to his family. In January, 2000 George was promoted to Director of Special Services for the MD.

George has a long list of responsibilities at his current job. He currently oversees all new water and sewer construction, wastewater treatment, new buildings, fire departments, MD Disaster Services and Ambulance Services, Radio Communication and is in charge of initiating installation of natural gas for MD communities. His area of responsibility (MD 17) extends from Calling Lake to Wabasca and Red Earth to Peerless Lake, the second largest (land mass) MD in Alberta.

George has been a member of the Alberta Water and Wastewater Operators Association (AWWOA) for 15 years. In March of 2000 he was nominated and was voted in as one of the AWWOA executive. He is currently active on the AWWOA nominations committee and publicity/promotions committee. He is also one of the executive members who voluntarily offered to have his head shaved for "Water For People" at the next AWWOA Annual Seminar. George is also very active in the Lions Club, forming clubs in Wabasca and Red Earth and serving as District Governor. This is his third term as President in Wabasca. He is also involved with the Eyes and Ears Program (Child Protection and Crime Prevention) and local campground and rodeo grounds projects.



George and his bride Jan have three children and two grandchildren. In his spare time, George keeps busy with local service clubs, as well as hunting and fishing with his two sons.

George would like everyone to know that he "enjoys the privilege of being given the opportunity to serve on the executive of the AWWOA." He would also like to encourage everyone to sponsor the people who put their names forward for the Water for People-Canada fund raising at the 2001 AWWOA Banff Seminar.

LOOKING FOR NOMINATIONS

The Nominations Committee is looking for people interested in serving on the AWWOA Executive. If you are a full member in good standing and want to be involved in the direction of our organization, contact: Andrew Maguire at (Phone) (780) 412-7622 (Fax) (780) 412-7679, or Scott Chant at (Phone) (403) 646-2902 (Fax) (403) 646-2653 or George Mair (Phone) (780) 891-0628 (Fax) (780) 891-3772.

AWWOA OPERATOR OF THE YEAR Nominations

The Alberta Water and Wastewater Operators Association is soliciting nominations for "Operator of the Year". Municipal officials, plant managers, or any member of the AWWOA may submit nominations.

Nomination Guidelines

- 1 The nominee must be a "member of good standing" of the Alberta Water and Wastewater Operators Association.
- 2 Written nominations must be received by January 31, 2001, for the March 2001 presentation.
- 3 The nominee must have provided exemplary service to the water and wastewater field over an extended period of time.

Written nominations and brief biography can be sent to:

Allan Kendrick
C/o The Alberta Water and Wastewater Operators Association
P.O. Box 34010, 196 A Kingsway Mall P.O.
EDMONTON, AB, T5G 3G4

Or Fax to:
(403) 823-1353

AWWOA "RON BAYNE AWARD" - SERVICE AWARD

We need your assistance to recognize an outstanding individual.

The AWWOA would like to recognize an individual, nominated by you, who has contributed in a significant way to the goals of our Alberta Water and Wastewater Operators Association. This award is in recognition of long dedicated service to the Association while on the Executive or in an advisory capacity. The individual should be someone who has furthered the goals of training, education and certification of operators in the Province of Alberta.

If you know of someone that you feel is deserving of this award would you please contact me at (780) 523-5955, Fax (780) 523-4227. Please follow up your call with a short note of recommendation outlining the reasons for your nomination.

Thank you

Gerard Hollman
AWWOA Vice Chairman



BANFF CERTIFICATION EXAMS

FROM THE AWWOA CHAIR Doug Thorson

Our Alberta Water & Wastewater Operators Association held its Annual Seminar in Banff, Alberta from March 7 to 10th at the Banff Park Lodge. Those delegates I spoke to felt this years 25th Annual Seminar was by far the best we have had in many years. We again had a record breaking total attendance of 627 people. The purpose of our seminar is to provide timely practical knowledge and training that can be put to use in your own treatment facility, distribution and or collection system. To provide a forum for interaction with suppliers and contractors in our business and be introduced to the wide variety of products they offer. If we are not fulfilling these goals then we are missing the mark and you need to let us know.

I am a firm believer that this is my Association by membership, as it is yours. While a member of your Executive and as your present Chairman I serve you, the membership. All decision made will be in the best interest of our Association not for the individual, and I will do my best to use good stewardship of the position you have elected me to.

Some highlights of our Seminar included an opportunity to meet the suppliers at a Tuesday evening wine and cheese, most generously sponsored by our many suppliers. Some delegates and suppliers commented to me that they enjoyed this most of all. The wine and cheese evening was like "old home week" seeing familiar faces and catching up on all the latest news.

Your Association was proud to present Ken Grant, a graduate of the NAIT Water and Wastewater Technician Program with our NAIT Award. This award is presented to the student with highest scholastic average in this program. Ken achieved a 97.3% overall average and we are delighted to recognize his achievement.



**KEN GRANT - MILLET
NAIT ACHIEVEMENT AWARD**



**BRUCE MacLENNAN
1999 OPERATOR OF THE YEAR**

I think this speaks very highly of your personal touch, on and off the job. A well deserved recognition to you Bruce.

The Ron Bayne Service Award is presented annually to the individual who has contributed in some significant way to the goals of our Association through training, education, and certification of operators in Alberta. The 1999 Ron Bayne Award was presented to Andy Bebbington for his outstanding contributions over the years to your AWWOA.



**ANDY BEBBINGTON
RON BAYNE
SERVICE AWARD**

Another highlight that I would be remiss not to mention was a very skillfully constructed scale model of the Red Deer Wastewater Treatment Plant, on display in the main entrance of the hotel. Bill Blades, an operator at the plant constructed the model, over a three year period, solely on his own time. This model required many hundreds of hours of painstaking attention to detail, and received numerous compliments and accolades. You did a very professional and articulate job Bill and we congratulate you. We were happy to have Bill display this model. It shows just one more facet of our ever expanding and changing business.

I would like to close my remarks by thanking everyone that participated in our 25th Annual Operators Seminar. If the seminar was successful it was because of the effort of all those who were involved; operators, suppliers, Banff Park Lodge staff, seminar speakers, seminar organizers, and our guests. Thank you all.

1999 AWWOA OPERATORS SEMINAR



THE AWWOA BOOTH



PRODUCT DISPLAY



HANDING OVER THE GAVEL

COURSES OFFERED 2000-2001

The following classroom, correspondence and homestudy courses will be offered in 2000 and 2001. The training brochures will be mailed out to all certified operators, members of the Alberta Water and Wastewater Operators Association, as well as all municipalities in late August. If you do not receive your copy by September 1, 2000, please contact Del Morrison at (780) 427-8130.

COURSE	LOCATION	DATES
Level I Certification Preparation Course Part "A"	Edmonton	October 5 & 6 2000
Level I Certification Preparation Course Part "B"	Edmonton	November 15 & 16, 2000
Hydrant & Valve Seminar	NAIT	December 12 & 13, 2000
Filter Optimization	Red Deer	January 23 & 24, 2001
Management & Supervision for Operators	Edmonton	February 13 – 16, 2001
Level II Certification Preparation Course	Edmonton	March 21 & 22, 2001
Alberta Operators Seminar	Banff	March 6 – 9, 2001
Chlorination Workshop	Red Deer	April 10 – 12, 2001
Level I Certification Preparation Course Part "A"	Edmonton	April 3 & 4, 2001
Small Water Systems Course	Red Deer	May 2, 2001
Small Wastewater Systems Course	Red Deer	May 3, 2001
Level I Certification Preparation Course Part "B"	Edmonton	May 15 & 16, 2001

Correspondence/Homestudy Course

Water Treatment Plant Operations Correspondence WCWWA
 Practical Mathematics for Operators Correspondence WCWWA
 Level I Certification Preparation Correspondence
 Level II Certification Preparation Correspondence
 Small Water System Homestudy Course

Small Wastewater Systems Homestudy Course
 Wastewater Treatment Operations "A" Homestudy Course
 Wastewater Treatment Operations "B" Homestudy Course
 Rotating Biological Contactor (R.B.C.) Homestudy Course
 Pumps; Theory, Operation & Maintenance Homestudy Course

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- Labels – consumer restricted products, supplier labels, decanting, labs and other applications.
- MSDSs – how to read the MSDS and apply the information it contains.

WHMIS Computer Training System requirements:

- Windows 95, 98, NT, Local Area Network or Stand-alone
- CD ROM Drive

Includes:

- Separate training and record-keeping modules
- Special access feature for trainers
- One free test reset per trainee
- Database manages up to 128 simultaneous, multi-user hits.
- Sort records by name, ID number, or date
- Department and contractor menus that can be edited.
- Randomly generated tests
- Full colour photos and meaningful animated graphics
- Program tutorial and help screens

To find out pricing or to order please contact:

Hazard Alert Training & Supplies Canada Inc.
4940 – 87 Street
EDMONTON, AB, T6E 5W3
Tel: (780) 466-6960, Toll Tree: 1-800-561-2319
Fax: (780) 466-6048
Email: hatscan@hatscan.com
Website: www.hatscan.com

BLUEPRINTS FOR SAFETY

HATSCAN is now a distributor for the full line of CLMI video-based training programs. Blueprints® for Safety programs provide much more than training! Each program consists of:

- Instruction for establishing a compliance program that meets all regulatory requirements and “best practices”
- A written, scripted training program
- An award-winning video, and
- Five employee handbooks!

Scripted training includes training tips, a glossary of terms, an instructor guide, and a learning exercise. An overhead slide package on floppy is available for some programs.

Call HATSCAN today for pricing, to arrange a preview, or to register for an upcoming Video Showcase.

Blueprints® for Safety titles include:

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- Bloodborne Pathogens (2 program)
- Confined Space Entry
- Construction Fall Protection
- Cumulative Trauma Disorder (5 programs*)
- Effective Safety Committees
- Elements of Ergonomics (2 videos)
- Ergonomic Task Analysis*
- Emergency Preparedness
- Eye Protection
- Fire Extinguisher
- Flammable Liquids*
- Hearing Conservation
- Housekeeping
- Lockout/Tagout
- Machine Safeguarding
- Office Ergonomics
- Office Ergonomics Task Analysis*
- Personal Protection Equipment
- Forklift Safety
- Order Picker Safety
- Powered Pallet Jack Safety
- Reach Truck Safety
- Ready for Work*
- Respiratory Protection
 - Safety Program Management (2 videos)
 - WHMIS*
 - Worker's Compensation Management

*Sold as video only

AWWA WESTERN CANADA SECTION

WATER FOR PEOPLE

by Doug Thorson

Water for People Canada (WFP-C) is a program designed to help poor people in developing countries help themselves. WFP-C focuses on drinking water projects and related water resource, sanitation and hygiene education initiatives



UPDATE SPRING 2000

As the AWWOA Executive member responsible for Water for People I have been given the privilege of reporting on this very rewarding project. Right up front, I wish to thank as personally as I can, everyone who participated in raising funds for this cause. Heartfelt thanks to those who generously donated silent auction items, to organizers, bidders, and those who raised funds in other ways (golf) during our seminar week, including our Association. Albert Schweitzer, a medical missionary once said, "do something for which you get no pay, but for the simple privilege of doing it", and you have done this.

With so many people in this world who still today do not enjoy the simple gift of water and sanitation, we can know that our efforts provide many smiling faces from the recipients of our projects. At our 1999 Operators Seminar, \$3,916 was raised for Water for People. This year, over \$6260.00 was raised for Water for People, a 37% increase in contribution. We will apply to the Wild Rose Foundation of Alberta who in the past have matched our donation. We were planning on sponsoring another children's school in Vietnam. Unfortunately shortly after the Seminar in Banff, the political system in Vietnam changed, and we were unable to complete our desired project. However, we were able to complete two other projects. One in Guatemala and one in Bolivia.

The project in Guatemala is in the upper section of the Village of Batzumal II. There were 13 homes that did not have access to water or potential access to utilize a spring-fed system. During the dry season, the villagers carry water from the lower portion of the village to their homes. On average, this journey takes one hour and is made about 5 times a day. During the wet season, the villagers use a "seep:" site to capture water. In addition the villagers crated their own catchment area, using hollowed-out logs as gutters.

As a result of this makeshift communal water source, test results showed presence of E-coli and many pathogens. The project will be building a 450-liter tank with an overflow that the villagers can use to increase their storage capacity. One 55-gallon drum will be given to each home for extra storage.

The other project financed by the money is in Cachuyo, Fourth Section of the Chayanta Province, Bolivia. Cachuyo is a small community that does not have access to water, sanitation, electricity or transportation. The people of Cachuyo are subsistence farmers and herders with very little income. This project is designed to provide one gravity-flow water system to the village of Cachuyo using a nearby mountain spring as the water source. This system will utilize 40-scheme PVC for the adduction line and construct a 3,000 litre storage tank and nine tapstands for community use.

I would like to close by quoting a famous writer Dennis Waitely who said, "the greatest achievements, are those that benefit others". Thank you all very much.

RETIRING

Len Heilemann, Technologist, with Alberta Environment in the Parkland Region has retired after 28.5 years of service with the government. Len started his career with Alberta Agriculture in 1972. He then joined Alberta Environment in 1980 with the opening of the new regional office in Red Deer. Len has visited many of the



communities in the central Alberta region and his valuable knowledge and experience with operations of the water and wastewater facilities will be missed. Len will be enjoying his spare time on his retirement "hobby" farm. We wish you well in the future, Len.

WATER – FUEL – ENVIRONMENT TECHS IN KOSOVO

by M.Cpl. M.W. Pennie, WFE Tec

May 28, 1999, 1 Combat Engineer Regiment from Edmonton deployed to the Balkans in anticipation of building two camps, one camp for 1000 people and one for 500 people. Along with the other trades people and the Field Engineers, three WFE Tech's were deployed. At the same time a Construction Troop from Green Wood, Nova Scotia was also deployed with a WFE section of four people.

The WFE tech has three main areas of responsibility, water purification, wastewater treatment, under ground utilities and any environmental concern that needs attention. The life of a WFE tech is very challenging due to the wide scope of responsibility but it is also very interesting and rewarding.

Deciding what type and quantity of equipment to bring is a challenge due to the variety of job demand, location of the deployment and length of stay, as well, it all had to fit into sea containers. The equipment we bring for the most part will be the only resources you will have to choose from for the first three or four months until the military supply system is in place. The intention is not to be dependent on the local economy for tools or materials. These sources were definitely not open for business and even if they were they would not have the quantities required.

The Regiment arrived in Macedonia and set about preparations for the move into Kosovo. Weapons were fired and sighted - in, ballistic plates were issued, and ammunition, hand grenades and rocket launchers were given out to each soldier. In addition to the soldier side of preparations the trades people also had to sort out the sea - containers of tools and materials in anticipation of the up coming projects.

The move into Kosovo was very tense, as we had to move through the mountain roads that were very narrow and had just been taken control of by the NATO forces. We were moving in, as the Serbian Army was moving out.

The first town we encountered was about 30 km inside the border. The local population was out in the hundreds to greet the convoy; they were throwing roses all over the trucks, as they were very excited to see the first NATO troops. In fear of reprisals the locals had not been out of their homes during the day for the last few months. The parade was ON!

The expectation was for the Squadron to stay here for a couple of days and get a feel for the country with little expectation of any trades work other than normal soldering. This changed very quickly. The locals were under the impression that the departing army had poisoned the local water source. The usual custom in these situations is for the departing factions to deny the use of the water by contaminating the source with dead chickens, dead cows or other dead things in the wells, reservoirs and



other sources, thus making the water unsafe. The local authorities spoke with our commander and questioned him to the possibility of verifying the water source.

The decision was made to deploy two WFE techs and a security detail to go and check the water source using our portable toxicity kit. With any task such as this there are many questions and decisions to make. How secure is it for the Tech's in the area; land mines and booby traps in the buildings, where is the purification plant if any and what class is it, are the routes passable for our large vehicles? There turned out to be a class 3 or 4 plant nestled in the mountains. This plant served a population of 300 to 350,000 people. The equipment that was of any value such as the chlorination system and lab equipment had been removed.

The plant was in need of repairs but the water source and reservoirs were free of contamination. The water at this time had been turned off for two months. The sand filters and reservoirs were flushed and the water was turned back on.

The move was on once again. We packed up and moved to the industrial section of Pristina, which is in the center of Kosovo. A site was chosen for our Squadron and the construction started as soon as the area was secured. The area of our camp had one large building that was just a shell. This was excellent for our purposes, as we were able to use this to house the main body of our people (90). The carpenters constructed sleeping quarters, offices etc. While this was going on the WFE tech's and plumbers were busy digging in utilities and trying to figure out the local sewage and water system. We installed a holding tank and then installed a force main system to the existing sewer. The local sewer had to be cleaned, as it was full of garbage. This is normal practice in these types of situations as there was no garbage disposal for the last few months and the locals try and dispose of it any way they can. The city water was down but we tapped into the line any way. This was something we could fix at a later date. The quality control / quality of materials and local codes of construction vary widely from town to town. This only adds to the fun and the hours of figuring out how every thing works. All the work that had to be performed outside the camp was more challenging by the real possibility of land mines. These areas had to be cleared by the Field Engineers before the Trades people could get to work.

The Construction Troop from Green Wood arrived a few days after we were set up. Their mission for the six months was to construct a 1000 man camp in a large open field next to an old airport. The 408-helicopter squadron from Edmonton was to move into this camp and be totally self-supporting. The WFE tech's had a well drilled to serve as a dedicated water source that we could control and treat if required. The water distribution system and the collection system stretched as far as a km. Digesters were installed in parallel for the individual shower and washroom units. These digesters in turn flowed in to a central collection system. This water distribution system also included a 90,000L reservoir for water storage and fire fighting.

Fuel storage was also set up by the WFE techs. Two 90,000L bladders along with all the required pumping systems were installed.


Construction was booming all over the Canadian area of responsibility. Five more camps were being constructed that would house 20 to 120 troops. The WFE techs and plumbers were installing water and sewage systems at a great rate. No two systems were ever alike due to the types of buildings the troops were in and how much was left of the civilian systems that we could use.

The WFE tech's also had the opportunity to do some direct humanitarian work by providing potable water to a hospital, aid station (Doctors With Out Borders), and a city of 10,000 people and surrounding area. The decision was made to deploy a Reverse Osmosis Water Purification Unit for this purpose. The unit was run and maintained by the WFE tech's for a period of 24 hours per day, 7 days per week, for a three-month period, and was able to deliver over 3,500,000L of water.

We faced many challenges during this seven-month deployment on a daily basis that required a lot of hard work and dedication on the part of every trades person. The challenges faced not only raised our capabilities but also gave us a sense of great accomplishment to have helped a war-torn nation.



MUNICIPAL WASTE MANAGEMENT FACILITY OPERATOR CERTIFICATION FOR COMPOST FACILITIES



Olds College will be offering a 3-day tutorial highlighting the new requirements for the compost Class I and II, A & B Facilities. This tutorial will cover all of the competencies required for the Certification Exam.

Certification Exams will be held by Alberta Environment. Certification Exam Applications must be received by Alberta Environment by September 20, 2000, for the November 2000 exam session. Contact Alberta Environment directly to obtain applications for certification examination. Contact the Certification Section, Municipal Program Development Branch, Environmental Science Division, Alberta Environment, 9820 – 106 Street, Edmonton, Alberta T5K 2J6 or phone (780) 427-8130.

Location: Olds College
Date: November 13 – 15, 2000 or
May 14 – 16, 2001
Fee: \$499 (prior to October 28/April 30)
\$550 (after October 28/April 30)
Fee includes study guide

2000-2001 CERTIFICATION EXAM SCHEDULE

Anyone who is interested in writing certification exams may request application forms from:

Alberta Environment
Municipal Program Development Branch
9820 - 106 Street
EDMONTON, AB, T5K 2J6
Fax: (780) 427-5204

DATE	LOCATION	APPLICATION DEADLINE
November 17, 2000	Edmonton	September 20, 2000
November 17, 2000	Calgary	September 20, 2000
March 6, 2001	Banff	January 20, 2001
May 29, 2001	Edmonton	April 10, 2001
May 29, 2001	St. Paul	April 10, 2001
May 30, 2001	Red Deer	April 10, 2001
May 30, 2001	Peace River	April 10, 2001
May 31, 2001	Medicine Hat	April 10, 2001
May 31, 2001	Grande Prairie	April 10, 2001
May 31, 2001	Lethbridge	April 10, 2001
June 1, 2001	Calgary	April 10, 2001
June 1, 2001	Lac La Biche	April 10, 2001

THE FUTURE STARTS HERE ... COMPOST!

The Tenth Annual Conference,
Exhibits and General Meeting
September 27, 2000
Shaw Conference Centre,
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The Future Starts Here ... Compost!, is the leading conference in Canada for those involved or interested in becoming involved in composting. The conference provides attendees with a variety of opportunities to gather the latest, most up-to-date information on composting initiatives and programs, developments in technology, processing and equipment, marketing and applied research. Just as important, the Conference provides the venue to meet and network with others in the Canadian and International composting industry.

For additional information contact:

Olds College, Composting Technology Centre
4500 - 50th Street, Olds, AB T4H 1R6
Ph: 403-556-4683 • Fax: 403-556-4718
Email: dchaw@admin.oldscollege.ab.ca

The Alberta Utility Operator is published three times a year by the Municipal Program Development Branch of the Environmental Sciences Division, Alberta Environment, as a means to exchange information for those involved in the operation of water and wastewater facilities. The contents do not necessarily reflect official opinion or policy and, unless otherwise stated, should not be construed as policy or regulations. **The Alberta Utility Operator** and Alberta Environment allow the Alberta Water and Wastewater Operators Association to publish noteworthy information in this newsletter, however, we cannot be held responsible for the accuracy of information submitted. Contributions, comments and criticisms are welcome.

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