

## Inside

- ~ President's Prattle P. 2
- ~ Secretary's Scrawl P. 3
- ~Water Quality Distrubution
  - Seminar 2004 P. 4
- ~ Opening West Wodonga
  - **Wastewater Treatment**
  - Plant P. 5
- ~ New Products P.6

#### AROUND THE TRAPS -

- ~ Central P.3
- ~ Private Industries P.7



Mr Mick Bourke EPA Chairman at the official opening of the West Wodonga WWTP See details page 5







Mr John Harris W.I.O.A President and Mr Eddy Ostarcevic Grampians Water at the recent distrubution seminar See details page 4

Newsletter of the WATER MOUSTRY OPERATORS ASSOCIATION OF AUSTRALIA Inc. A12314

## Editorial

## Welcome to the third edition of Operaror for 2004



What is happening in the water industry?

Yes lately water has become big news.

In June there was the release of the Victorian Government's White Paper, which according to most commentators appears to set a new benchmark for water reform within Australia. It is proposed that in addition to the establishment of an environment levy (some have said yet another tax) on all water bills the Government has set out their vision for how water is to be managed within Victoria.

Under the catch cry of "Our Water Our Future", the Victorian Government has established goals for all Victorians to encourage smarter water use and for the management of water across the State. One of the initiatives within the white paper is that an environmental value is placed on the impact of water.

With the release of the Victorian Government's White Paper there is a high anticipation that there will be actual implementation of projects that will assist the management of our limited water resource.

THE EDITOR

#### THE LIGHTER SIDE

#### Some performance evaluation comments Hope they are not talking about you!

- 1. "Since my last report, this employee has reached rock bottom and has started to dig."
- 2. "His men would follow him anywhere, but only out of morbid curiosity."
- 3. "I would not allow this employee to breed."
- 4. "This associate is really not so much of a has-been, but more of a definitely won't be."
- 5. "Works well when under constant supervision and cornered like a rat in a trap."
- 6. "When she opens her mouth, it seems that this is only to change whichever foot was previously in there."
- 7. "He would be out of his depth in a parking lot puddle."
- 8. "This young lady has delusions of adequacy."
- "He sets low personnal standards and then consistently fails to achieve them."
- 10. "This employee is depriving a village somewhere of an idiot."
- 11. "This employee should go far and the sooner he starts, the better."
- 12 "Not the sharpest knife in the drawer."
- 13. "Got into the gene pool while the lifeguard wasn't watching."

## President's Prattle

Boy how time flies - here we are producing the "Conference" edition of Operator and our big annual event is almost on us yet again. It only seems like yesterday we were in Shepparton and we now look forward to welcoming everyone to Wodonga.

The drought has broken in some areas, particularly the south of Victoria, but the north is still very dry and I hear that around 90% of NSW is now drought declared. Hopefully a change in weather for the rest of the country is just around the corner and everything will get a much needed soak. More importantly, we need some good rain to fill our storages.

Various new Acts and Regulations have come into force in Victoria from 1st July 2004 and with them comes increasing pressure to implement quality systems. In a number of cases, the level of change we are experiencing is extraordinary as we grapple with the introduction of HACCP for our water systems and Environmental Best Practice for reuse to name just a couple. Our operator network is fast becoming an invaluable resource to assist other operators dealing with these and other issues. At the risk of sounding like a broken record, we need you to share your experiences with other operators and the industry in general. An ideal way to do this is to do a Poster paper or a platform paper at our conference and share your experiences or alternatively, write an article for this newsletter or for WaterWorks. If you are interested please talk to myself, Secretary George or any other Committee person. They would be only too willing to help.

As most of you would be aware we broke some new ground in late May by organising and running a seminar for operators working in the "distribution" area. This day was a resounding success with over 140 people attending. From all reports the day was worthwhile and everyone would have taken away plenty of information to consider implementing at their own worksites. Due to a lot of enquiries, we are now considering running this event again. Keep your eye out for future flyers advertising this event.

Again, it would be great to get the feedback from Members about what sort of topics are of interest to you. I am sure that we have the right contacts at the right levels to provide informative and relevant seminars on basically any topic relating to the water industry. We just need you to register an interest and we'll do the rest.

Our annual conference is almost on us and is promising to be bigger and better than ever with the largest trade exhibition we've ever assembled (90+ companies) and with 18 platform and 11 poster papers in the program. Look out for the registration form and make sure you approach your boss to send you along. You need to tell your managers this is where you learn, not only from the technical program, but also through the networking process. You can never under estimate the value of friends and contacts!

We look forward to catching up with you all at the conference in Wodonga.

"Happy Operating" John Harris. WIOA President.

# Secretary's Scrawl

#### WIOA - Secretary's Scrawl - August 2004

#### 2005 Membership Fees

The 2005 membership fees have been set at our recent Committee Meeting and will remain at \$15 and \$165 for individual Members and Corporate supporters respectively. Both fees are inclusive of GST.



#### 2004 Conference

Arrangements are well under way for the Engineers and Operators Conference and Registration forms have been mailed out already.

The program of speakers and topics and the range of Operator poster papers is excellent. The trade exhibition will be our biggest ever and the number of sites filled has already surpassed our previous record. Remember the dates - September 1st and 2nd in Wodonga - hope to see you there.

#### 7th Annual Charity Golf Day

Arrangements for this day are under way and it will be staged on Sunday 31st October at the Trafalgar Golf Club. More info will be forwarded in the near future. Please try to support this day, even if you don't play golf seriously. There are categories for all standards of players, great prizes and the day was great fun last year. We raised a considerable sum for charity and had an enjoyable time into the bargain.

#### "National" News

The WIOA Executive have arranged and attended a number of meetings recently with various people interested in furthering the operator cause. Meetings have been held in Tasmania, Queensland and New South Wales and things are now looking very positive for the development of a truly National group in the near future.

We have also been developing closer ties with both NZWWA and AWA and have separate Memorandums of Understanding between WIOA and both these organisations ready to be signed. These are important documents as they set the cooperative ground rules for us to move forward. They also include a number of specific undertakings for all organisations to work towards achieving.

#### **New Members**

Welcome to the following people who have recently joined our Association as **Members**.

Geoff Higginbottom, Roy Coburn, Frank Braden, Dion Sleep, Glenn Peck, Alexander Notley, Scott Bannister, Dean De Menech, Mick Wyzenbeek, Craig Harvey, Kevin Donahoo, Michael Braden, Chris West, John McKechnie, Andrew Dean, Jon Belej, John Callaghan, Greg Hepworth, Daniel Irish, William Mudie, Neville Whitehead, Paul Wilkie, Bryan Chatelier, Bill Dilg, Terry Watt, Gary Stanley, Mick Mahoney, Paul Coffey, Howard Baldwin, Peter Fedke, Guy Jeanneret, Jason Marnell, Chris Dole (again), Nick Vaccaro, David Wheeler, John Anderson, Ron Peters.

And the following new Corporate Members:

Engineered Products Group, United Water, Thiess Services, Masterfoods Australia, AWMA, Peerless Industrial Systems

## **Around the Traps Central Region**



#### Thwaites opens Torquay tank

Minister for Water John Thwaites visited Geelong on Friday, June 25 to open Barwon Water's new \$4M 15Ml water storage tank in Torquay.

Mr Thwaites was in the region to promote the government's new White Paper Our Water Our Future, an 'action plan' to enable smarter water use and ensure water supply to sustain growth over the next 50 years.

Our Water Our Future sets out 110 new initiatives for water conservation aimed at every sector of the community. The plan follows on from the State Government's green paper on water reform, released in 2003, which contained 80 proposals for conserving water.

If you would like to read the white paper go to the web site, www.des.vic.gov.au/dse/index.htm and follow the links.



(L to R) Minister John Thwaites, Mr Stephen Vaughan, Chairman Barwon Water and Mr Michael Crutchfield, Member for South Barwon .

#### **HACCP** accreditation

Barwon Water has recently obtained HACCP:9000 certification for the harvesting, treatment and distribution of drinking water. HACCP (Hazard Analysis and Critical Control Point) is a risk-based management system adopted by the Codex Alimentarius, a food standards program issued by the World Health Organisation (WHO).

HACCP:9000 integrates HACCP and ISO 9000 into one management system, aligning it with Barwon Water's current management systems.

Obtaining this accreditation is a significant step for Barwon Water enabling compliance with the recently legislated Safe Drinking Water Act 2003, which requires water suppliers to prepare and implement plans to manage risks in relation to drinking water.

### Water Quality Distribution Seminar 2004

The WIOA recently staged a seminar aimed specifically at distribution operators dealing with issues relating to the operation or maintenance of the water reticulation network. The seminar was convened in response to demand from WIOA Members, as well as by a need identified through discussions with various water system managers. The event was held in Rockbank, not far from Melbourne, and was attended by 140 operators. We extend our thanks to Western Water for helping with the organisation of the day.

After extensive consultation, a program that was relevant and targeted specifically at the distribution system operators, was arranged. The presenters for each segment were chosen carefully to ensure that we had skilled and knowledgeable people sharing their experiences with us. The presentations were pitched at a hands-on level and importantly, the intent of this seminar was to provide some ideas about what is done, when, where and how.

It was not the intention of WIOA, nor that of the presenters, to dictate what work systems, policies or procedures should be implemented at any particular Authority. The idea was to provide information on what was being done elsewhere and to challenge the operators to consider whether any of this would be suitable for implementation at their worksites.

#### The speakers included:

**Peter Mosse** - (Gippsland Water) who talked about the ADWG, HACCP, how to monitor systems to improve the water quality and therefore service delivery to the customers, and a case study in solving odour complaints.

**Jill Busch** - (Gippsland Water) talked about disinfection and the effective control of pathogens

**Neil Healey** - (Goulburn Valley Water) talked about issues relating to managing work teams where there is a cross over of duties between water and wastewater treatment and distribution functions.

**John Hearn** - (South West Water) passionately spoke about the role of the operator in keeping the distribution system running well and showed us a very important tool - a white bucket to check water colour.

**Anthony Ohlsen** - (Central Highlands Water) spoke about their odour case study on how subjective this issue can be and gave us an opportunity to experience some "watery smells" first



hand.

John Hearn From South East Water Ltd

Malcolm Hill & Andrew Forster-Knight - (South East Water) spoke about their mains flushing program and showed us a predictive model they are working on to allow flushing to be better targeted for optimum results.



**Greg Creek** - (EPA Victoria) gave us some info on what we should or shouldn't do with the water flushed out after system repairs or addition of new mains. Certainly requires a risk assessment to be undertaken.

Last but not least was **Melinda Bawden** - (WSL Consultants) who spoke about sampling issues and gave us important information on the do's and don'ts of sampling.

Overall the day was a resounding success and the interactive workshop session at the end of the day provided us with a few ideas to investigate and to possibly include in future seminars. The overall view was that we should run this event again to cater for those operators not able to attend this time. There is also a possibility of staging a similar event in other States so if you are interested, contact the WIOA Secretary Mr George Wall at seminar@wioa.org.au and he'll get in touch with you.

#### **Antony Evans seminar Chairman**



Peter Mosse from Gippsland Water

## **Qld Operators Conference**

Secretary George, Vice President Cynthia and Ron Bermeier attended the Water Industry Workshop in Queensland recently. A full report will appear in the next edition of Operator



(L TO R) Mr Brian Davis from Qld EPA, Qld Operator of the year Mr Ross Shannon and Tony Wright from Actizyme.

## Offical Opening of the West Wodonga Wastewater Treatment Plant Friday 28th May 2004

North East Water in partnership with Purac Pty Ltd, upgraded the Wodonga Waste Water treatment plant at a cost of \$17M. This is the first plant under the government's partnership agreement to be designed, built and operated in Victoria.

The upgrade was designed and project managed by Purac. Construction started in February 2002 with Technical completion on the 7th July 2003. Under subcontract the civil structural design was by Connell Wagner, plant civil works constructed by John Holland Construction, electrical works by Positron Power, earth works by Walsh Earthmoving and environmental and biosolids issues by LV Rawlinson Associates.

The upgrade consisted of duplication of the inlet structure complete with new inlet pumps, step screens, vortex grit removal and odourous gas extraction to a new three stage gas scrubber, duplication of the bio reactor, dissolved air flotation tank for sludge thickening, aerobic digestion, centrifuge for dewatering, sand filtration with chlorination for off site reuse and ultra violet disinfection for effluent to river. Further work involved the rehabilitation of existing sludge lagoons and maturation ponds as emergency storage.

The off site water reuse is at the stage of verification through Department of Human Services for class A quality. The plant now meets all requirements of the stringent EPA Discharge Licence for effluent discharged to the Murray River with all biosolids to be sent off site for beneficial reuse or application to agricultural land.

The opening ceremony was attended by about 60 guests with the official opening performed by the Chairman of the EPA Victoria, Mr. Mick Bourke. Site tours were performed by the process design engineer Mr. Robert Proctor and plant manager Mr. Peter Tolsher of Purac Pty Ltd.



(L to R):

Don Jackson - Manager of Technical Services North East Water,

Jim Martin - CEO of North East Water,

Peter Tolsher - Operations Manager of Purac,

Mick Bourke - Chairman of Victorian EPA

Ralph Evens - Managing Director Purac.

## **Conference Comp**

Yes it is on again the competion where everyone gets involved. Get organised to register your team of 3. Visit the trade sites and meet the challenge. You never know - You may win!

When you register each team will be provided a sheet with the sites to visit. Competion starts after lunch on Wednesday and ends on Thursday at 5 p.m. All sites and associated activities must be visited and completed within this time.

Omega Chemicals are sponsoring First Prize. There are also prizes for second, third and even last place. There is also a prize for the best challenge as judged by the teams

If you cannot make a team of three, leave your name with the registration desk, attention Peter Tolsher (Tolsh), and arrangements will be made to assist you.

Registration can be made at the registration desk or by contacting Peter Tolsher.

Good Luck! Peter Tolsher



2003 conference competitions winners



Australian Pollution Engineering display at 2003 conference

## **Private Industry**

#### Smarta disinfection flows in Victoria

Complying with the Australian Drinking Water Guidelines (ADWG) and legislation such as Victoria's Safe Drinking Water Act (2003), is generally accepted to be challenging in rural and remote communities, both technically and economically.

The Framework for Management of Drinking Water Quality suggests you adopt "preventative management strategies" to ensure public health is never compromised, but it's a catch-22: you need infrastructure that actually provides safe drinking water, yet conventional equipment simply isn't reliable when dealing with extreme variations in flow and temperature

However, WA company Smartaflow - exhibitors at this year's WIOA Engineers and Operators Conference - believe they have the answer. The company has recently opened a Victorian office and specialise in providing turnkey hypochlorite dosing systems that not only provide an accurate, safe and reliable means of treating drinking water, but radically reduce the total cost of chlorination.



Smartaflow Chlorisafe installation in rural WA

The company's Chlorisafe and Portachlor systems can be used for primary or secondary disinfection and are already used extensively by the Water Corporation of WA in communities that range in population from 12 to 2,400.

The systems can operate without mains electricity or run on solar power, and combine three core components to overcome the challenges of small town water disinfection:

1)The Smartaflow Pump - with automatic vapour release mechanisms to eliminate stalling and a turndown ratio 20 times that of a conventional metering pumps, the pump allows precise dosing of micro amounts even at extremely low flows.

2)Automatic decant configuration: a unique and award winning two tier arrangement eliminates OH&S handling concerns, minimises chemical wastage and requires minimal site attendance. Chemical is dosed from the lower level on a first-in, first out basis, without mixing or dilution and when depleted, the system automatically decants the upper level to replenish the lower level.

3)Smartaflow controller: allows the systems to be monitored and controlled from anywhere via any network. Easy to use, the controller is compatible with SCADA systems, can control associated equipment and can send CDMA/GSM text-message alarms direct to designated mobile phones. A 28-day rolling data logger is also built in.

For further information contact

Smartaflow's Business Development Manager Mark Wiltshire on (03) 9499 9821, mobile 0429 909 644 or email mwiltshire@smartaflow.com, or visit them at the Wodonga conference.

Contact: Maureen Mawson, Marketing Manager 0405 418 957



Below Smartaflow Portachlor.

#### What The?

At the recent WIOA weekend seminar one nameless Welsh corporate representative asked what he thought was the perfect question. The question was based on information provided during his talk and was for a grand 22-carrot gold prize. The obviously proud presenter, (he was wearing his Welsh rugby top), outlined his heritage and mentioned some of those famous Welsh villages with long names, no one questioned his pronounciation.

The question was to spell the name of one of these particular Welsh places mentioned. To the presenters amazement one of our illustrious members, who came well prepared, was able to provide the answer although there was some quibbling as to the actual letters, the presenter thought there was one critical letter omitted, but as it was extremely close the amazed presenter awarded the prize.

So you may ask what is the answer to the question well here goes LLANFAIRPWLLGWYNGYLLGOGERYCHWYRN-DROBWILLLLANTYSILIOGOGOGOCH (yes that's right 58 letters).

For those who do not speak or know much Welsh a translation provided to the editor is as follows "Mary's Church by the white hazel pool, near the fierce whirlpool, with the Church of Tysilio by the Red Cave".

The moral of the story is that once again the membership of the WIOA demonstrated that they are a very are knowledgable and resourceful lot.

### **Private industry(cont)**

#### **CDS Applications in Water Re-use**

CDS Technologies are no strangers to water treatment or to the Water Industry Operators Association. In fact the WIOA annual conference has proven to be the most successful venue for CDS in recent years.

A visit to the stand in 2000 by Matt Greskie - then of NERWA - preceded the installation of a CDS Gross Solid Separator in March 2001 on a raw water feed line at Bright. WIOA member Roland Passuello reported shortly afterwards that the pumps were better protected and that Chlorine usage had declined measurably.

A series of visits over successive years also preceded sales of CDS separators to Portland Water (tertiary treatment prior to the reed beds) and Barwon Water (Filter Media Recovery at Wurdee Buloc). Each application utilizes the unique non-blocking screening technology patented by CDS.

In more recent times CDS was awarded the largest of 27 grants under Smart Water to demonstrate the application of their unique technology to sewer mining. Based on the process application trialed at Barwon Water Ocean Grove for load-leveling (see Picture 1), CDS demonstrated their ability to produce Class A reclaimed at the very competitive rate of \$0.40 / KL (see Picture 2). Reports of the trials are available on request from CDS. **Phone (03) 9781 7808** 



Load-leveling trials at Barwon Water's Ocean Grove site demonstrated that the CDS FSS could manage a max flow of 3MLD for an operating cost of around \$0.20 / KL



Smart Water Trials at Croydon & Cranbourne demonstrated CDS' ability to produce Class A re-use product for around \$0.40 / KL with E.Coli, Turbidity and TSS reduced by over 98.8%, BOD5 reduced by 95.8% and NH4 - N reduced by 49.3%.

#### **Piping & Automation Systems (PAAS)**

The Piping Systems Professionals. Who is this company, and what do we do for the Water Industry?

PAAS has been appointed as the authorised George Fischer distributor with stock and warehouse facilities to provide continued access to products within the Southern Region of Australia.

To be more than just another supplier, we draw on many resources to provide solutions to all your Piping and Automation Solutions to suit each application. We have partners like Accurate Detection, who are specialists in leak detection devices, on line analyzer and flow monitoring, plus manufacture and service Streaming Current devices within the region.

Piping and Automation Systems looks forward to reestablishing your business needs for Signet Scientific products and complementary items from George Fischer along with level instruments from Flowline, Honsburg, Palmer, Metrotech and WTW to name a few.

At the WOIA conference PAAS will be exhibiting a cross section of our equipment and services, please register your name and interest whilst entering our daily draw for a bottle of Scotch.

The company is located at 4 Jacks Road,
South Oakleigh Vic 3167.
And can be contacted on (03) 9563 7666 or Fax (03) 9563 7722.
Automated Water Management Australia (AWMA)

AWMA supply and install automated channel level management systems to irrigation supply authorities such as Goulburn Murray Water, Murray Irrigation, Southern Rural Water, Coleambally Irrigation, Sun Water, Wimmera Mallee Water and Murrumbidgee Irrigation.

The experience, designs and technology that has been developed for these and other authorities is now available in a range of automation systems, aluminium and polyethylene products specifically designed for on-farm use. AWMA have offices in Melbourne, Kyabram and Maffra as well as a manufacturing facility in Cohuna.

AWMA manufacture a commercial range of water control gates from aluminium or stainless steel, including Penstocks, Flood gates, Flap valves, Positive Seal gates, Layflat gates, Undershot gates, Head and Discharge gates, Plate Undershot, Sidewinder, Round Bottom, and many more. AWMA have a complete range of actuators, automatic controls and remote telemetry to compliment the gates.

AWMA manufacturing facility is run with over 30 staff including installation teams available for all products purchased. AWMA provides HDPE fabrication services. Everything from the on site welding of polyethylene pipelines up to 1000mm diameter both in ground and submarine, through to the fabrication of all associated items.

Contact Graham Webb Commercial Sales Manager (03) 5973 493

#### **NEXT FDITION**

Article Contribution Deadline For the November Edition 10th October, 2004



North East - North East Water, Goulburn Valley Water, Coliban Water and Mt. Buller Resort Management Board Roland Passuello - Ph 03 5754 4117 fax 03 5754 4290, mobile 0417 368 029, email: rpassuello@nerwa.vic.gov.au

South East - East Gippsland Water, Gippsland Water, South Gippsland Water and Western Port Water Russell Mack - Ph 5177 4659, fax 5177 4690, mobile 0427 331 586, email: MackR@gippswater.com.au

South West - Glenelg Water, South West Water and Portland Coast Water Anthony Evans- Ph 5562 9275, fax 5562 9262, mobile 0419 103 885, email: aeva@swwa.com.au

North West - Central Highlands Water, Grampians Water and Lower Murray Water

#### Expression of interest required

Central - Barwon Water, Western Water and Metropolitan Water Companies Graham Thomson - ph 5226 9109, fax 5226 9140 mobile 0408 993 756,

email: graham.thomson@barwonwater.vic.gov.au

Private Industry Cynthia Lim - Ph 9553 4555, fax 9553 4577, mobile 0409 403 237 email: Cynthia.Lim@fluids.ittind.com

Articles can be forwarded to area contacts or directly to The Editor email: graham thomson@barwonwater.vic.gov.au



AWMA lowering control gate into position



What you don't want - a root cutter stuck in a sewer



'OPERATOR' is printed by Barwon Region Water Authority. The WIOA gratefully acknowledges the support provided by Barwon Water in producing 'Operator'

#### WIOA 2004 OFFICE BEARERS & COMMITTEE

President

John Harris Phone (03) 5562 9275 Mobile 0417 338 688 Secretary/Treasurer George Wall

Phone (03) 5832 0718 Mobile 0407 846 001

#### Vice President

Cynthia Lim Phone (03) 9553 4555 Mobile 0409 403 237

#### Committee

Barry Waddell Peter Tolsher
Phone (03) 5152 4221 Phone (02) 60591569
Mobile 0419 878 085 Mobile 0419 337 151

Roland Passuello Graham Thomson
Phone (03) 5754 4117
Mobile 0417 368 029 Mobile 0408 993 756

Stephen Wilson
Phone (03) 5244 0800

Bruce Tyler
Phone (03) 57214254

Russell Mack Phone (03) 5177 4659 Mobile 0427 331 586

Anthony Evans Phone (03) 5562 9275 Mobile 0419 103 885

All correspondence should be addressed to:
The Secretary
64 Brauman Street,
SHEPPARTON, VIC. 3630

Website: www.wioa.org.au info@wioa.org.au

#### Disclaimer

The WIOA assumes no responsibility for opinions or statements of facts expressed by contributors or advertisers. All material in 'Operator' is copyright and should not be reproduced wholly or in part without the written permission of the Editor or Secretary



#### WANTED

Any articles, news snippets, information on improved work practices, ect as contributions to your magazine