

Australia EXCELLENCE OSERATIONS

August 2003 Edition

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Russell Mack at 2002 Conference, see page 2 for the "other" Russell.



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Poster Presentation 2002 Conference - see page 8 for more phototographs.

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

Editorial

Welcome.



As I begin to compile this edition I have just finished reading the June edition of "WaterWorks". What a fantastic effort the operators have done in not only producing quality articles but undertaking such essential "behind the scene" works. By reading stories associated with "operators" maintaining a quality potable water supply to areas affected by a major bush fire (s) you can begin to appreciate the efforts that operators must make in difficult circumstances just to complete their job.

It is interesting to see that the next stage in the approval process for a soil treatment plant has been given by the State Government for the Dutson Downs site in Gippsland. According to recent press reports when implemented this site would be Australia's first facility to decontaminate and recycle soil. As the Dutson Downs site is owned by Gippsland Water is this another area where the water industry is being proactive or beginning to diversify further?

See you all at 2003 Conferance.

THE EDITOR

President's Pratte

How time flies when having fun. The Conference is coming around fast and the registrations are out, so make sure you book in for this fabulous conference in Shepparton on the 3rd and 4th of September. The papers are first class and some with new innovations and 62 trade sites have been taken. We congratulate Ron and Cheryl Bergmeier for an outstanding effort in pulling the trade exibition together.

Peter Tolsher has organized the operator challenge again this year and some excellent prizes are on offer. Make sure you form your team early. Remember the early bird catches the

Also the committee is encouraging all conference registrants to fill out a conference evaluation sheet this year. The completed evaluation sheet will be put in a draw with one winner getting a terrific prize kindly donated by G-Tech. Keep your ear to the ground and remember if you don't fill it in you can not win.

Special thanks go to Barwon Water for their outstanding contribution to the Operators Association through their assistance in printing our newsletters and conference manual. We also appreciate the efforts of all our corporate supporters over the year, as without this help we would struggle to survive.

Also, if you are in a position to attend the NSW Conference it is on the 16th and 17th of September at Penrith Panthers. This is also growing into a good conference. These Conferences are the way we learn by seeing new equipment and technology as well as excellent papers and poster papers and the thing you can never under estimate is the networking you get out of theses events.

Look forward to catching up with you all at Conference.

"Happy Operating" John Harris. WIOA President.



Around the Traps South East

East Gippsland Water, Gippsland Water, South Gippsland Water & Western Port Water

Gippsland Water

Russell Mack, (below) complete with broken nose and two black eyes after a weekend football altercation (should have seen the other guy).

Just goes to show you that even though Russ is mega safety conscious at work - he still has accidents away from work!! Gippsland Water Treatment group have been religiously feeding panda bear Russ with rare bamboo species, and he is making a speedy recovery.



More South East news appears on page 5.

STRANGE BUT TRUE.

Information from recent reports indicate that the 10 year ocean voyage of various bath toys (originally about 29,000 in number) is soon about to end.

Curtis Ebbesmeyer, who is a retired oceanographer from Seattle, said the assorted bath toys including frogs, ducks and turtles will soon be making a landfall in Nova-Scotia, Canada.

According to Curtis, who has been monitoring the movements of the toys for over 10 years, the items originally came from a shipping container which was washed overboard in the Pacific Ocean.

Since then the items have travelled about 32,000 kilometres initially north through whale pods in the Bering Sea then onto the Arctic Ocean where they encountered ice packs and then on past the British Isles.

The latest press reports the toys (ducks) are now heading south (about time!) after passing the eastern shores of Greenland and heading towards Labrador.

In addition to the accumulation of weed and barnacles there may even be traces of the name of the Chinese manufacture across their bodies.



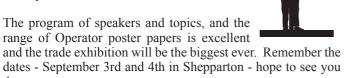
2004 Membership Fees

The 2004 membership fees have been set at our recent Committee Meeting and are **\$15** for individual Members and \$165 for Corporate supporters respectively. Both fees are inclusive of GST. This is the first rise in the individual fee since the Association was formed in 1972, with the exception of the addition of \$1 for the GST in 2000.

The Committee feels the modest increase is necessary to cover the spiralling costs of production and distribution of information to our Members. When our fees are compared to some other organisations, we're sure you'll agree that we get great value for our annual membership dollars.

2003 Conference

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





As advised in the last edition of Operator, the review of the National Water Industry Training Package is currently underway. Workshops have been staged in all Australian States looking at the structure, content and relevance of the Package. The outcomes from each of the workshops are currently being collated into a single report which must be returned to the Australian National Training Authority (ANTA) by September 2003.

It appears from a preliminary review of the issues raised in each State, that there is some degree of similarity in the types of comments returned. It is likely that some modifications to the Package will be recommended, and we'll keep you posted about the outcomes of this important project.

5th Annual Charity Golf Day

Arrangements for this day are under way and it will be staged on Sunday 2nd November at 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.

Website Address

We've finally managed to sort out the necessary paperwork to allow us to change our website address to bring it in line with our new Association name. Our new website address is **www.wioa.org.au** but for the time being we will also keep a copy of the site at our former address of **www.awwoa.org.au** The old name will stay valid for the

next 12 months then a redirect will be placed to forward people to the new address. Please make sure you update your favourites folder next time you are surfing the web.

Our e-mail address has also been changed to **secretary@wioa.org.au**

Correspondence via E-mail

Just a reminder that it is possible to receive all Association correspondence via e-mail instead of hard copies. This saves the Association quite a lot in postage costs, time and effort. If you would like to take advantage of this service and be added to the e-mail list please send me a note to info@wioa.org.au Occasionally the newsletter or other documents exceed 1MB or the recipients e-mail account is full. This causes difficulties when trying to get files through to some Members due to limits on file sizes or the amount in storage. In these cases, I get a non-deliverable message back and then send a hard copy of material by normal mail. Don't worry - you won't miss out on anything.

New Members

Welcome to the following people and companies who have recently joined our Association as a Member or Corporate Supporter:



Doug McMillan, David Neal, Chris Pendergast, Russell Pearson, Colin Metcalf, Steve Rickwood, Maxwell Cox, Colin Ellett, Nigel Kennett, Steve Hunter, Rick Hartland, Graeme Tognolini, Mark McNeil, Michael Goulding, Rod Harland, John Pearson, Darrin Cini.

New Corporate Supporters: Goldenfields Water County Council, Parchem Construction Products, Nordical Diving Services, Tamworth City Council, Piping & Automation Systems.

George Wall WIOA Secretary



Around the Traps Private Industry

PROFILE OF A CORPORATE MEMBER

Acromet (Aust) Pty Ltd

Acromet commenced operations in October of 1962 as a wholly Australian-owned company with Australian distribution agreements for American and Canadian equipment for the water supply and treatment industries. The initial product range specialised in gaseous Chlorination and Metering Pump Chemical feeding equipment.



At this time, Acromet was the first company to introduce the then unique All Vacuum Chlorination system into the Australian market - a system now adopted by all major manufacturers.

Our beginnings, although humble, were based on innovative equipment for its time, designed by our founder who has a passion for providing robust and reliable products with the highest accuracy possible to the market place.

As a result, in 1969 Acromet increased its concentration on the industrial market with the introduction of an All Australian designed and manufactured range of Diaphragm and Plunger Metering Pumps and accessories. This range of pumps, known as the 900 Series, became the chemical metering work-horse for many industries throughout the late 1960's, 1970's and early 1980's.

During this early period, the company also established a technically strong engineering division, responsible for the introduction of newly developed process pump technology into the general and Petro-Chemical industries.

The product range was further extended with the addition of Electro-magnetic Metering Pumps, Gear Pumps, Air-Operated Double-Diaphragm Pumps and Magnetically coupled Centrifugal Pumps.

In 1982, after considerable investment in design and development, the company released a range of Dry Material Feeders that now cater for an extensive market in the Bulk Materials Handling industries.

At the same time, we also redesigned the 900 Series metering pumps to incorporate a wider range in the performance envelope and increased the number of liquid heads that could be fitted to a single unit. The new pump was released in 1983 as the Acromet 3000 Series, which itself has become a dominant player in the market and is still in production today at our Clayton Victoria manufacturing facilities.

Although the 900 Series metering pumps were discontinued from production, our spare parts, factory service and repair facilities were maintained for 17 years. This is a philosophy rarely seen in the industry today yet still continues in our other manufactured products. This level of commitment is one of the reasons that Acromet is the only Australian manufacturer of metering pumps and has assisted us with the expansion of our many satisfied customers around the world who use our Australian-made products.

Throughout the years, product design and development has always been a high priority on Acromet's agenda. The 1990's were no exception, with further development culminating in the release of the Acromet robust 2000 Series metering pump in 1993 and the 2500 Series metering pump in 1994. Again, this continues our founder's concept of a robust, reliable and accurate metering pump, which along with the well established 3000 Series, makes Acromet the leading manufacturer and supplier of metering pumps in the country.

Cynthia Lim and WIOA would like to thank Acromet.



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NEXT EDITION

Article Contribution Deadline For the August Edition October 10, 2003

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South West - Glenelg Water, South West Water and Portland Coast Water
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North West - Central Highlands Water, Grampians Water and Lower Murray Water To be advised article to The Editor

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Around the Traps Central

Barwon Water, Western Water & Metropolitan Water Companies

Melbourne Water

OPEN DAY A HIT WITH THE COMMUNITY

On the 16 July 2003 more than 1200 people took the opportunity to visit the Western Treatment Plant, located at Werribee, with some travelling from as far as Ocean Grove, Ballarat and Kinglake to see one of the world's largest sewage treatment plants.

Each year Melbourne Water opens the plant, which covers about 11,000 hectares, to the community. The plant treats about

54% of Melbourne's sewage and has been in operation for more than 100 years.

Melbourne Water Managing Director Brian Bayley said visitors were taken on a tour that included Lake Borrie, the internationally recognised wetlands that host up to 270 species of birds.

"People visiting the plant also saw one of Victoria's biggest cattle farms, a \$124 million environmental upgrade underway at the plant, and the new Melbourne Water Discovery Centre, which opened last week."

The Discovery Centre features an interactive exhibit, which encompasses the water supply system, sewage treatment, water recycling, stormwater management, waterways, and bays and oceans.



Around the Traps South West

Glenelg Water, South West Water & Portland Coast Water

EPA Chairman Showcases South West Sustainability

One of the challenges of water authorities is the continued promotion to communities and Councils of reuse and recycling investments.

On May 27, EPA Chairman, Mick Bourke, toured the South West to showcase the leading role of South West Water in biosolids management and the achievement of 100% recycling of wastewater for Camperdown and Terang.

Camperdown wastewater was the second largest point source pollution in the Corangamite Lakes region and Terang the largest source of discharge to the Mt Emu Creek, the largest tributary in the Hopkins Catchment.

EPA Chairman, Mr Mick Bourke, says, "South West Water has made substantial achievements in developing reuse facilities and implementing reuse schemes for both treated wastewater and biosolids throughout their region."

"South West Water is on the leading edge in Victoria in trialing and developing practical ways to manage and reuse biosolids."

HACCP Implementation Progress

The HACCP (Hazard Analysis Critical Control Point) Plan for the Warrnambool Water Treatment plant is complete and was implemented on 10 June 2003.

Work started on the plan in February 2003 and was completed in May 2003.

The HACCP Team, consisting of staff from all disciplines, held eight lots of three-hour workshops to compile the plan. A further meeting was held with the plant operators to iron out operational issues.

Training for the HACCP Team was provided by Mike Jones from the Queensland Department of Primary Industries, Centre for Food Technology.

A total of seven Critical Control Points have been identified at the plant. The plan will be in place for two months before a further review is held to verify its effectiveness. In the meantime, work has now started on the Camperdown Water Treatment Plant HACCP Plan and is progressing ahead of schedule.

New Products

Microprocessor Controlled Metering Pumps.

Acromet (Aust) Pty Ltd is proud to announce the release of its new range of BT Series electromagnetic microprocessor controlled metering pumps.

The new BT series incorporates some of the proven and reliable features of the Acromet E Series range of metering pumps, such as 'duck bill valves' and a filtered foot valve assembly as standard items.

The BT Series is available in wall mount (BT-MF) or foot mounted (BTB-MF) configuration making it extremely adaptable to any given mounting application.

The Foot mounted BTB-MF range is available in capacities up to 15 litres an hour at pressures ranging up to 20bar while the wall mounted BT-MF is available in capacities up to 80 litres an hour and operating pressures up to 20bar.

Standard features include IP 65 weather proof rating, level control function, acid resistant plastic housings, and a new generation of 'smart' microprocessors.

The BT Series is a fully functional integral control metering pump with the ability to be controlled via an external pulse signal that can be multiplied or divided from 1 to 999 giving the BT the ability to meet some of the toughest turn down requirements of industry.

The BT's can also be controlled via a remote 4-20mA process signal or via one of the internal weekly or daily timers. Such is the thought that has gone in to the new BT's that they can even be connected to your computer via a serial cable (RS232).

Other standard features include an inbuilt alarm buzzer that can trigger to indicate loss of flow when used in conjunction with the external in line flow monitor.

The BT series metering pumps are available in many different liquid end materials, to ensures that chemical compatibility is never an issue and as with the Australian manufactured range of Acromet metering pumps the new BT Series comes with the Acromet exclusive five year diaphragm warranty.

Around the Traps South East (cont)

East Gippsland Water

Environmental solution! It's a natural.

Construction of East Gippsland Water's (EGW) Macleod Morass Constructed Wetlands project is complete.

Deputy Premier of Victoria and Minister for Environment and Water, the Hon. John Thwaites, officially opened the project on May 13, 2003. (Details of hydraulic control structures built during the early construction phase were published in the July 2001 edition of "Operator Magazine".)

Mr. Thwaites said the \$1.9 million project guaranteed high quality reclaimed water delivery to Macleod Morass, provided environmental security and stood as an excellent example of how water can be re-used in an innovative way to improve a local environment. (The Ramsar Convention of 1971 listed Macleod Morass as a wetland of international significance, especially in relation to migratory bird habitat).

The concept of constructed wetland lagoons within Macleod Morass became the project's key to success and a win, win situation for EGW, community and environment.

While examining future options for reclaimed water produced at its Bairnsdale Wastewater Treatment Plant, (BWWTP), EGW's extensive consultation program with stakeholders determined that a guaranteed supply of high quality reclaimed water would be the best option for halting degradation of the wetland and would lead to rehabilitation of the Morass.

Until then, in the absence of an identified environmentally desirable means of utilizing all BWWTP's reclaimed water, long-term tenure of the plant on the western escarpment of Macleod Morass was under increasing scrutiny and in doubt.



Constructed lagoons within Macleod Morass.

Despite an option to sell all reclaimed water to private interests, EGW's Board members preferred environmental gain with benefits for generations to come. Now, an assured release of reclaimed water from the constructed lagoons (see picture) provides security for Morass habitat, flora and fauna, and alleviate any need for expensive infrastructure relocation with EGW customers bearing costs.

So, how do constructed lagoons within wetlands provide a winning formula? EGW's wastewater management includes improved nutrient removal at BWWTP through optimal chemical dosing to maximize phosphorus reduction, along with chemical dosing of the old lagoon system to immobilize phosphorus in existing sediments. Reed-beds and plants in the constructed lagoons further reduce nutrients as the water filters through - "Nature's" way.

When the reclaimed water is eventually released to the Morass, its quality and assured supply leads to wildlife habitat restoration, increased biodiversity and makes possible water regime management within sections of the Morass. Control of European Carp, pests and salinity is therefore achievable.

That's Win with a capital W.



Around the Traps Private Industry

PROFILE OF AN OPERATOR

Welcome to the seventh edition of 'Profile of an Operator'. David Tickner joined the WIOA committee last year and he has recently made an exciting career move. David shares his experiences with us.

Profile: David Tickner.

- Works for:- Veolia Water (Yes, Vivendi Water has changed its name!).
- ◆Job title:- Operator
- ◆Main role:- Working on the Aqua BOOT Project which consists of water treatment plants at Bendigo, Castlemaine and Kyneton. Bendigo operations also operate the Kyneton Waste Water Treatment Plant.
- Lives in:- Golden Square Bendigo recently relocating from Warracknabeal.
- Hobbies:- fishing, motorbikes and model aeroplanes. However there's been little time to enjoy my hobbies with the new job and home.



Background.

My previous employment was with Grampians Region Water Authority in the north west of the state. My role there was Water Quality & Environment Co-coordinator for the northern district of the Authority, and involved dealing with a wide variety of water and waste water quality issues, from small untreated systems to new water treatment plants, wastewater plants and reticulation. Co-coordinating, monitoring and sampling were also a part of this role. In March this year I commenced work with Veolia Water in Bendigo as a Plant Operator with the Aqua 2000 plants, which consists of micro filtration water treatment plants at Bendigo, Castlemaine and Kyneton. The company also operates Kyneton Waste Water Treatment Plant.

Qualifications.

I have attained the AQF3 qualification and possess 17 years experience in the water industry.

Describe the major differences you have found between a regional water authority and Veolia Water.

- *smaller area to service.
- different technology membrane filtration/ozone/BAC exclusively in water treatment.
- •links to other parts of Australia and news and support from overseas.
- •country side much hillier, greener and wetter (although they say it's still dry!)
- treatment plants are of larger capacity
- •more stringent water quality parameters
- •contact with research and development from Sydney and France

Projects we are working on.

The Bendigo group recently received certification for Quality,

Environmental and O. H & S Systems. We are currently developing a maintenance procedure for our ozone systems that will enable us to carry out our own service work on the ozonators

The major challenges you face in your new role.

Major challenges are rapidly learning the intricacies of the four plants including the membrane filtration systems.

Consistently producing high quality water that meets stringent guidelines.

The other main challenge, like most people in the industry, is coping with the drought and all its associated problems.

Cynthia Lim and WIOA would like to thank David Tickner and Veolia Water.



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Safety Feature.

Research released in February 2003 by WorkSafe Victoria and SunSmart, shows the need to implement a 'get tough' campaign to improve the sun protection practices of outdoor workers and the building and construction industry (includes

the Water Industry).

Recent studies show that building and construction workers are on average exposed to five times the maximum recommended exposure limits for UV radiation. They are also the worst when it comes to being sunsmart on the job.

WorkSafe Executive Director, John Merritt said it has long been known that UV radiation can have a serious effect on the body.

"It is time that the construction industry improves its practices in line with the other outdoor workers sectors. They must lift their game".

"Skin cancer is the most common and costly cancer to our health system and we must minimise its cost to business and to those at risk of this disease".

Some important facts regarding human exposure to ultraviolet radiation.

In men aged 15 to 44, melanoma is the most common cancer Invasive melanoma most commonly occurs on the trunk, head / neck and arms of males.

In Australia, sunburn can occur in less than 15 minutes on a clear day in January.

A natural tan offers limited sun protection, usually an average of a Sun Protection Factor (SPF) 4 depending on skin type, and this does not reduce your risk of skin cancer.

Outdoor workers are at higher risk of basal cell and squamous cell carcinoma due to their high levels of UV exposure. Skin cancer accounts for more than 100 visits an hour to GP's in Australia.

"We have successfully worked with other outdoor workers. Now it is time to bring the construction industry into line, our new resources are aimed to assist both employees and employers".

"SunSmart will work with the building and construction industry to implement strategies that have workers well protected from the suns harmful rays".

SunSmart's Craig Sinclair said the building and construction industry had lagged behind others.

"With the support of unions, the industry and WorkSafe Victoria, the turnaround should be swift. The collaboration between WorkSafe, outdoor workers, industry and SunSmart is an important one".

"Skin cancer is the most common and costly cancer to our health system and we must minimise its cost to business and to those at risk of this disease".

The educational material is designed for employers and employees. It can be obtained over the internet at www.sunsmart.com.au

Hard copies are available from WorkSafe Victoria offices or the Cancer Council Victoria.

Article courtesy of WorkSafe Victoria.



Wanted.

Any articles, news snippets, suggestions for an "Operator" to be part of "Around the Traps", information on improved work practices, etc as contributions your magazine.

Helpful Web Site.

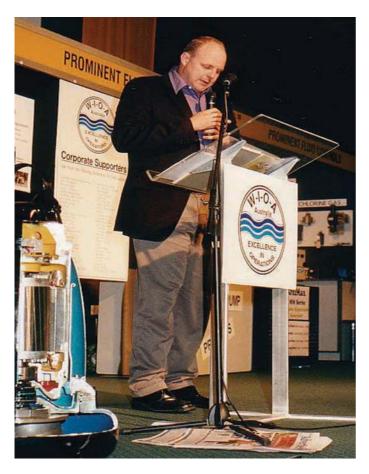
A new link has been added to the WIOA web page for a program that assists in "converting" all manner of things. It can be found under the "resources" tab at our website. (Address is www.wioa.org.au/rescources/index.htm).

The reason it has been put there is a lot of people have seen Cynthia Lim use it and have asked her for a copy.

We understand it is "Freeware" so there shouldn't be any trouble in copying the file for your own use.

If readers are aware of other helpful websites and/or programs which we can include on our website similar to the converter that may assist other operators please forward them on, see Secretary Scrawl for contact details for web site.

Highlights of 2002 Conference



Conference Entertainer - Bill Brownless (above)



It's Magic (above)

Draeger Stand (below) With Interested Observers



View of Conference (below)

