



Dan Roderick, Kelly Dancer, Tali Roitman and Itzhak Amar at the recent SPLASH! Expo on the Gold Coast

Argentina, Guatemala, Ecuador, Uruguay and Chile.

"In South America there are some regulatory issues in some countries, where they're restricting imports," says Amar. "They've put on a huge import tax. This has led us to think maybe we

ustralia has also been a positive market. Australia had an increase of about eight percent, maintaining a share of just over 10 per cent of the solar pool heating market in Australia and New Zealand.

Amar says it's a good perfor-

"Worldwide, Heliocol has done well over the past year, showing a total sales increase of 20 per cent."

store or something. We're going to protect our network of people because we've got a great relationship with them."

Another niche product they're launching is a solar kit for spas. It is based on a principal similar to domestic hot water solar, but made entirely from plastic.

"We've already tested it in a few installations in New Zealand

and Europe," says Dancer. "The results are really promising. We'll see it here in 2013; we'll launch it in Singapore at Piscine SPLASH! Asia."

Worldwide, Heliocol has done well over the past year, showing a total sales increase of 20 per cent. Most of that increase came in South and Central America, especially

should manufacture in some places like Brazil or Argentina."

Next year, they will also focus a little more on the burgeoning market of India.

"India is still hopeful, but it's a very challenging market. It will be part of our strategy to focus on India next season," he says.

Amar says the recovery in the United States has helped the overall figures, and Aus-

mance with more potential.

"Our Australian operation is one of the strongest and most professional. It really impresses us with the installation quality especially in the commercial sector.

"You can find more and more small commercial installations here, and worldwide, this is one of the most efficient and professional markets." ■



The performance of your pool filtration system is critical to maintain a healthy environment for your family and friends.

When Emaux Pumps and Filters are specified, you can be assured of a filtration system that is of the highest quality. Emaux meets or exceeds Australian and International quality and performance standards at a cost which reflects our international competitive strength.

For further information call us or visit our website.

www.emaux.com.au.



Pool Pumps and Filters

The clear choice in water technology

1300 293 633



Are you a hostage to your skilled employees?

Steve Smit

I had an interesting conversation with a client the other day. He runs a small business and one of his staff asked him for a significant pay increase. They're already being paid well above industry standards and really, for what they're doing, they're at the limit of what they should be getting paid.

His problem is this: their position isn't systemised.

There are no instructions or procedures that would allow anyone else to do that job. At the moment, even though it's all amicable, to some degree he feels he's being held over a barrel. He feels he's got few options but to pay more, because he can't afford to lose the person he's got.

Does that sound familiar?

Well, the big news is – it's his own fault. No one – including the business owner – should be irreplaceable in a business. If you design your business so that people just go about doing their work and keep

Harness the power of the sun
Heatseeker Solar

- ✓ Solar Pool Heating
- ✓ Pool Covers Rollers
- ✓ High Performance Evacuated Tube Technology
- ✓ Heat Pumps

www.supremeheating.com.au
1300 787 978



Supreme Heating

Specialists in heating for homes & pools



all the knowledge about their role in their head, you are always going to be victim to a situation like this.

The answer to this of course is good systems – including developing a procedures manual. Here are a few ideas to help.

Always have a backup plan

Have a plan for when people leave. Good systems make it easy for you, so if someone leaves your business for whatever reason, it's less traumatic than it needs to be. Other team members can step into the breach and take over easily until you get a replacement.

Help new people acclimatise

Make it easier and more effortless for new people to get up to speed fast. Your systems become a core of your training for people. The step-by-step instructions they provide give you a structure to walk them through; something to work with so you don't have to sit, watching over their shoulder; and a constant reference point for all those questions they have when they're learning the ropes.

Setting a standard

By listing out how things are done, you can

also define the level they need to achieve.

That way you don't constantly need to engage in those annoying questions about how well something was done or not – it's all there in black and white.

The visual impact

When you can see something set out, it's much less complicated. You can sit back and work with someone else to find out how to make it easier, simpler and better for everyone involved. After all, the whole process is there in front of you.

Don't be held hostage to valuable people just because you don't know exactly what they do. Your business is far too important to rely on any one person, including yourself.

So get moving; write a long list of all those tasks that get done on a regular basis. This is your starting point to create your procedures manual. ■

Steve Smit is a business coach with Reality Consulting. He works with business owners who want to increase their take home profits and work shorter hours. For a free copy of his Business Accelerator Pack visit www.realityconsulting.com.au or email stevessmit@realityconsulting.com.au.

Extra Tips

ehow.com offers this advice on writing a procedures manual

- If a task or process is done by more than one person or group, standardise the task first, then document it.
- Disseminate the changes: altering a book that no one sees isn't going to keep employees on the same page.
- Use indexes and always try to minimise duplication by referring people to other sections in other areas as necessary.
- Some management prefer to have very vague information in their procedures to allow for interpretation and minimise audit findings; others find that the more detailed the information is, the better their employees perform.

Contact: www.ehow.com

Aqua-Quip's Innovative Lighting Solutions

NEW! Evo FG LED FLUSH MOUNTED LIGHT FOR FIBREGLASS POOLS

- Low profile design, fits 60mm hole.
- Suitable for both vinyl and fibreglass pools.
- Simple to install.

All Aqua-Quip lights are now supplied with a Quick-Connect plug kit for easier installation.

Evo2 – LED FLUSH MOUNTED FOR NEW POOLS

- Suitable for concrete pools and spas.
- Stylish, compact and modern design.

QC LED RETRO-FIT SURFACE MOUNTED

- Variable Voltage 12v AC ~ 32v AC
- Supplied with universal mounting bracket.
- Replaces all brands of lights in concrete pools.

Contact Aqua-Quip for your nearest distributor.

AQUA QUIP

MANUFACTURED BY:
AUTOMATIC POOL CLEANERS (AUSTRALIA) PTY LTD
40 PERCY STREET AUBURN NSW 2144
PH: +61 2 9643 8338 FAX: +61 2 9643 8448 www.aquaquip.com.au



AQ 006 SPLASHhph

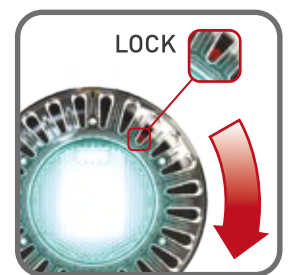
YOU SPEAK, WE LISTEN...

You told us you wanted a compact, high-performance and easy-to-install niche light for **CONCRETE POOLS**. Now it's yours!



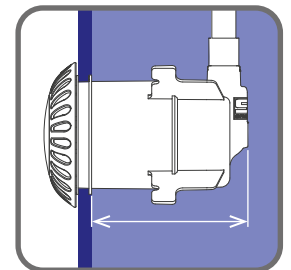
NEW PLUG SYSTEM ✓

For improved electrical connection & reliability



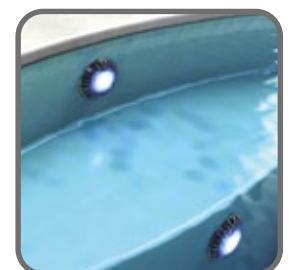
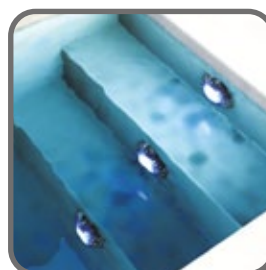
CLICK-FIT MOUNTING ✓

Patented mount system with no visible fasteners



ADAPTABLE NICHE ✓

Adjusts to suit thin & thick exterior or internal walls



LIGHT DIFFICULT AREAS ✓

You can now easily illuminate steps, swim-outs, & ledges



ATOM (EM-series) lights incorporate patented **PULSEWAVE®** & **DUOSINK®** technologies for superior reliability.

Contact **SPA ELECTRICS** today to find out how ATOM (EM-series) lights can improve your Concrete, Fibreglass or Vinyl pool project



phone +61 (0)3 9793 2299

fax +61 (0)3 9799 9300

web www.spaelectrics.com.au

atom
emSERIES

National *SPASA* Awards

The best of the best have been judged and the 2012 National Pool and Spa of the Year Awards winners have been announced.



Placid Pools, winner of Freeform Natural Pool over \$100,000

Residential Concrete

Traditional up to \$50,000

Gold: Freedom Pools & Spas, SA

Silver: Boardwalk Pools, WA

Bronze: Platinum Poolscapes, NSW

Residential Concrete Traditional \$50,000 to \$100,000

Gold: Good Soil & Water, VIC

Silver: Majestic Pools & Landscapes, QLD

Bronze: Exclusive Pools, WA

Residential Concrete

Traditional over \$100,000

Gold: Majestic Pools & Landscapes, QLD

Silver: Sunset Pools, NSW

Bronze: Baden Pools, VIC

Residential Concrete

Combined Pools/Spas

Gold: Daydream Pool and Spas, SA

Residential Concrete

Freeform up to \$50,000

Gold: Majestic Pools & Landscapes, QLD

Silver: Alpha Pools, SA

Bronze: Roebuck Pools & Landscaping, WA

Residential Concrete Freeform

\$50,000 to \$100,000

Gold: Majestic Pools & Landscapes, QLD

Silver: Platinum Poolscapes, NSW

Bronze: Quantum Pools, SA

Residential Concrete

Freeform over \$100,000

Gold: Placid Pools, QLD

Silver: Quantum Pools, SA

Residential Fibreglass up to \$40,000

Gold: Summertime Pools, SA

Silver: Freedom Pools, QLD

Bronze: Gordon Avenue Pools and Spas, VIC

Residential Fibreglass over \$40,000

Gold: Compass Pools Victoria, VIC

Silver: Compass Pool Centre Northside, QLD

Bronze: Local Pools & Spas, NSW

Commercial Fibreglass

Gold: Aqua Technics Commercial, WA

Residential Vinyl Lined In-Ground

Gold: Poolscape Pools, WA

Silver: Albatross Pools, VIC

Bronze: Pleasure Pools, SA

Residential Pre-Engineered Above Ground Vinyl Lined

Gold: Classic Pools, QLD

Silver: Classic Pools, SA

Bronze: Classic Pools, WA

Residential Enclosed/Indoor

Gold: Reflections Pool and Spa Care, WA

Silver: Peressin Pools, SA

Bronze: Sunrise Pools Australia, NSW

Spas Concrete

Gold: Aloha Pools, VIC

Silver: Platinum Poolscapes, NSW

Bronze: Urban Oasis, SA

Hot Tubs

Gold: The Pool and Spa Shop, SA

Silver: Endless Spas, VIC

Display Pools

Gold: Barrier Reef Pools Northside, WA

Silver: Daydream Pool and Spas, SA

Bronze: Classic Pools, QLD

Commercial Pools or Spas up to \$250,000

Gold: AVP Commercial Pools, WA

Silver: Essential Pools, NSW

Bronze: Surfside Pools Commercial, QLD

Commercial Pools or Spas over \$250,000

Gold: Aquarius Pools, VIC

Silver: Surfside Pools Commercial, QLD

Bronze: AVP Commercial Pools, WA

Commercial Renovations up to \$250,000

Gold: Quantum Pools, SA

Commercial Renovations over \$250,000

Gold: AVP Commercial Pools, WA

Renovations under \$25,000

Gold: Adelaide Classic Pools, SA

Silver: Concept Pools Australia, NSW

Renovations over \$25,000

Gold: Reflections Pool and Spa Care, WA

Silver: Peressin Pools, SA

Bronze: Norfolk Pools, QLD

Innovative

Gold: Sunrise Pools Australia, NSW

Silver: Majestic Pools & Landscapes, QLD

Bronze: Water Features by Design, WA

Water Features

Gold: AVP Commercial Pools, WA

Silver: Aquastone Pools & Landscapes, NSW

Bronze: Aloha Pools, VIC

Lap Pools

Gold: Quality Dolphin Pools, WA

Silver: Aloha Pools, VIC

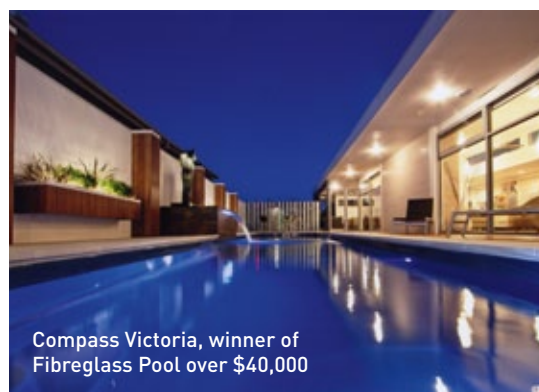
Bronze: Daydream Pool and Spas, SA

Sustainable Pools

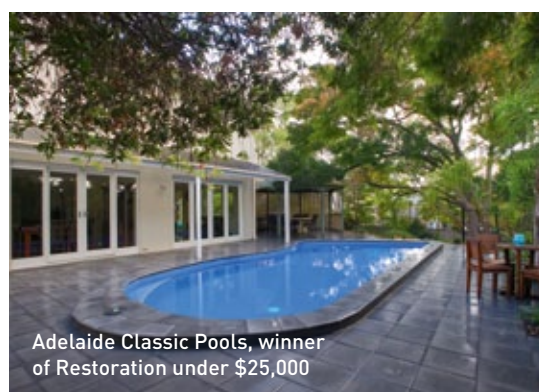
Gold: Aquarius Pools, VIC

Silver: Urban Oasis, SA

Bronze: Noble Pools & Construction, QLD



Compass Victoria, winner of Fibreglass Pool over \$40,000



Adelaide Classic Pools, winner of Restoration under \$25,000

Australians feature strongly in GAVA list

The winners of the Global AquaTecture Visionary Awards (GAVA) have been announced in Las Vegas, with winners coming from across the United States, Australia, Mexico, Portugal and Venezuela. Australian winners include Blue Stone Pool from Western Australia, Aloha Pools from Victoria, and Sunset Pools and Polar Pools from New South Wales.

Infinity Edge Gold

- StoneCrest Pools, Texas, USA
- All American Custom Pools & Spas, Connecticut, USA
- Blue Stone Pools, WA, Australia

Infinity Edge Silver

- Distinguished Pools, California, USA
- Aqua Blue Pools, California, USA
- All American Custom Pools & Spas, Connecticut, USA

Infinity Edge Bronze

- Sunset Pools, NSW, Australia

Freeform Gold

- Venezolana de Piscinas I, Venezuela
- Da Vida Pools, Texas, USA

Freeform Silver

- True Blue Swimming Pools, New York, USA
- Serenity Pools & Outdoor Living, Texas, USA
- Alderete Pools, California, USA

Freeform Bronze

- Colley's Pools & Spas, New York, USA

Perimeter Overflow Gold

- Downunda Aquatic Environments, Texas, USA
- Selective Designs LLC, Georgia, USA

Perimeter Overflow Silver

- Pool Environments, Texas, USA

Geometric Gold

- Pool Environments, Texas, USA
- Texas Pools, Texas, USA
- Blue Stone Pools, WA, Australia
- Polar Pools, NSW, Australia

Geometric Silver

- Texas Pools, Texas, USA
- Aloha Pools, Victoria, Australia

Natural Setting Gold

- The Swimming Man, Texas, USA

Natural Setting Silver

- Alderete Pools, California, USA

Interior Applications Gold

- Mill Bergen Pools, New York, USA
- Aloha Pools, Victoria, Australia

Interior Applications Silver

- Sunset Pools, NSW, Australia

Traditional Gold

- Aquascape, California, USA
- Pool Environments, Texas, USA

Traditional Silver

- StoneCrest Pools, Texas, USA
- Aloha Pools, Victoria, Australia

Traditional Bronze

- Texas Pools, Texas, USA
- Aquascape, California, USA

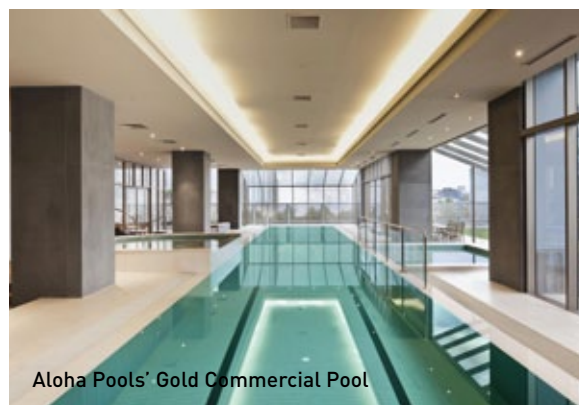
All Tile Gold

- Aloha Pools, Victoria, Australia
- Universal Group, California, USA

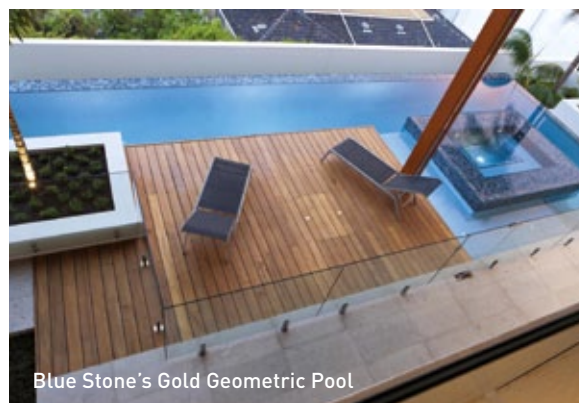
- Pool Environments, Texas, USA



Aloha Pools' Gold Special Application



Aloha Pools' Gold Commercial Pool



Blue Stone's Gold Geometric Pool

All Tile Silver

- Aloha Pools, Victoria, Australia

Vinyl Lined Gold

- True Blue Swimming Pools, New York, USA

Renovation Gold

- Pool Environments, Texas, USA

Renovation Silver

- Natural Water Environments, Texas, USA
- Venezolana de Piscinas I, Venezuela

Special Applications Gold

- Aloha Pools, Victoria, Australia
- Pool Environments, Texas, USA
- Covertch, New York, USA
- StoneCrest Pools, Texas, USA

Special Applications Silver

- Jorge Graca Costa, Oeiras, Portugal

Special Applications Bronze

- Covertch LLC, New York, USA

Structure Studios Gold

- Spring Creek Pool & Spa, California, USA

Structure Studios Bronze

- Distinguished Pools, California, USA

Spas Gold

- Alderete Pools, California, USA
- Aqua Blue Pools, California, USA
- Patio Pools & Spas, Arizona, USA

Spas Silver

- Alderete Pools, California, USA
- Hydroscaapes, Arizona, USA

Water Feature Gold

- Texas Pools, Texas, USA

Water Feature Silver

- MAC Landscaping, Nevada, USA

Commercial Pool Gold

- Aloha Pools, Victoria, Australia

Commercial Pool Silver

- Patio Pools & Spas, Arizona, USA

Commercial Spa Silver

- Spring Creek Pool & Spa, California, USA

SPLASh ASIA

SPLA
As

ASH!
sia

Splash Asia



Joins in on the fun!



Hayward have proudly joined the
PoolWerx family of Suppliers.

Call 1800 009 000
or visit www.poolwerx.com

PoolWerx
The Healthy Pool People

SPLASH!

Commercial news

- AsiaSpa Awards 58
- Drowning stats 58
- Freney wins 59
- Swimming won't save Indigenous hearing . . . 60
- Tide coming in 60
- In brief 60
- Global news 61
- Swimming doesn't cause asthma 61
- Historic fountain refreshed 61
- Tender of the month . . 62
- World's tightest ride. . . 62
- Councils return on risky investments 62
- National tender data . . 62
- New staff for Swim Australia 63

Safety

Pools' slight improvement amid "bleak" stats

The latest drowning figures are incredibly disappointing and make bleak reading, says the CEO of Royal Life Saving (RLS) Rob Bradley.

Bradley says that it is as if much of the education and awareness has simply fallen on deaf ears. "Overall there has been absolutely no improvement in drowning in most age groups for five years now. In some age groups the drowning toll is still rising. Public awareness of the dangers of water still appears to be very low. The number of drowning deaths in inland waterways is up 13 per cent on the five year average. It's clear that more work needs to be done in reducing drowning in Australia."

Swimming pool drownings fared better than some other categories, with the eight drownings of children aged 0-4 in 2011/12 compared to the five-year average of 17. Swimming pools continue to account for the largest number of drowning deaths in the 0-4 category, but most of the reduction in drownings in the overall category has come from the swimming pools segment.

"It's certainly positive to see that there's been a reduction in drowning deaths in this total category from the five year average of 32 to 21 this year," says Bradley. "We hope that trend continues. In this age group we are on track to achieve a 50 per cent reduction by 2020 if parents and carers of young children remain vigilant and employ

strategies such as active supervision. However the number of bathtub drowning deaths is alarming and more work is needed in this area."

Bradley attributes the decline in drowning deaths of children aged under five over the past four years to increased parental awareness of the importance of child supervision, restricting a child's access to water, the role of water awareness and learning CPR.

However, he says backyard swimming pools have been the real focus of recent prevention efforts, and other categories need improvement.

In the category 5-14, swimming pool drowning reduced to one, compared with the five-year average of four; in the 15-24 category they were down to two compared with the five-year average of four; and in the 55 years and over category they were down to eight compared with the five-year average of 12.

In related news, RLS is trucking in swimming pools on semi-trailers to provide the opportunity for schoolchildren to learn how to swim. This is following a successful Pool to Schools campaign run in New Zealand.

Go online to splashmagazine.com.au to get a QuickLink to the full report, and also a link to a petition to make primary school swimming lessons compulsory.

Awards

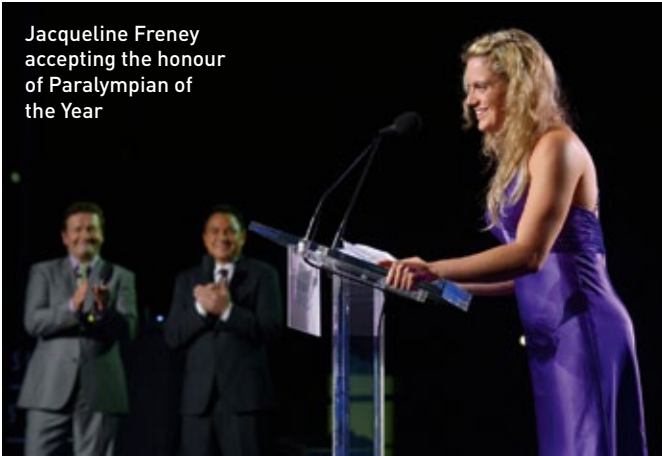
AsiaSpa winners

The AsiaSpa winners have been announced with two Singapore spas getting a gong: The Banyan Tree Spa at Marina Bay Sands picked up the Urban Spa of the Year; and ESPA at Resorts World Sentosa won the New Spa of the Year. Winner of the big prize, Destination Spa of the Year, went to Como Shambhala Estate in Bali.



Winner of the Urban Spa of the Year, Banyan Tree Spa Marina Bay Sands, Singapore

Jacqueline Freney accepting the honour of Paralympian of the Year



Accolades

Freney finds fame as Paralympian of the Year

Australia's Paralympic champions were given a rousing reception at the Sydney Opera House to celebrate their outstanding London Games achievements. Lord Mayor Clover Moore presented the team with the keys to the city in recognition of their results, which were the most successful since the Sydney Games in 2000.

The previous evening they had gathered at the Hordern Pavilion for the Paralympian of the Year Awards ceremony.

Swimming superstar Jacqueline Freney took the top honour of Paralympian of the Year, as well as being named Female Athlete of the Year. Freney scooped eight gold medals from eight events at London – including setting three new world records – to become the most decorated athlete of the Games.

Veteran swimmer Matt Cowdrey was also honoured last night with a special presentation for becoming Australia's most successful Paralympian and most prolific gold medallist, adding five London golds to take his career total to 13.

Swimmer Maddison Elliott shared Junior Athlete of the Year honours with wheelchair racer Rheed McCracken.

Freney comes from a family with a long heritage in the pool. Her father, Michael Freney is the head coach and manager at Evans Head Aquatic Centre on the New South Wales north coast; while her grandfather Peter Freney coached Siobhan Paton to six gold medals at the Sydney Paralympics and received the Order of Australia for services to swimming.

Movements

SA chief quits

Swimming Australia CEO Kevin Neil has stepped down following Australia's poor performance in the able-bodied Olympic pool. He is still expected to front the review into the team performance to help determine what went wrong in London.

Meanwhile, Australian coaching stocks have dropped with the departure of youth coach Vince Raleigh, Paralympic coach Brendan Keogh, head sports scientist Bernard Savage and head open water coach Greg Towle.

Double it. Halve it. And what have you got?

✓ **DOUBLE**
the time between backwashes.
✓ **HALF**
the time taken to backwash.

When you use Zelbrite Filter Media you will

SAVE WATER

and using less top up water you will

SAVE ON HEATING

BETTER
FILTRATION



SAVES
CHEMICALS

ZELBRITE is the only filter media with accreditation from all THREE of the following organisations

savewater.com.au



Ph: (02) 4651 2377 Mobile: 0407 078 075



Volley



Aqua Track

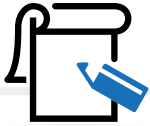
Hydrocare **Pools Plus**
TEL 02 9604 8396
robert@hydrocarepools.com.au

wibit™
the evolution of waterplay

Splasher



www.wibitsports.com



In Brief

Swimming Australia (SA) has announced ten new scholarship recipients as part of the 2012 Women in Swimming Rural Coaching Scholarship (WSRCS). SA in conjunction with the Australian Swimming Coaches and Teachers Association (ASCTA) targets individuals who might be otherwise unable to access high quality coaching education for rural or remote communities. This year's winners had full enrolment fees for the bronze course (valued at \$395) or a significant portion of the enrolment fees for the silver course (only paying \$175 from the full price of \$775) covered by ASCTA. Twenty-five applications were received this year with a total of 21 scholarships awarded since its inception in 2011.

Parkes Swimming Pool is getting a \$2 million upgrade thanks in part to a loan subsidy from the NSW Government's Local Infrastructure Renewal Scheme (LIRS). The \$70 million scheme provides councils with a four per cent interest subsidy over 10 years on loans to allow infrastructure projects to go ahead. Go online at splashmagazine.com.au for more information on the LIRS.

Village Roadshow is looking to increase its workforce by 25 per cent this summer, which includes lifeguard and ride attendants jobs at Wet'n'Wild and Sea World, as well as positions in retail, maintenance, food and beverage, and gaming.

Health

Swimming may not save Indigenous hearing

A three-year, \$700,000 study of Aboriginal health has not found any evidence that the swimming pool programs help chronic ear infections amongst the remote Indigenous population.

The study by the School of Medicine at Flinders University, reporting to the Federal Department of Health and Ageing, was released in August 2012. Its chief author was Associate Professor Linnett Sanchez.

The research was into strategies for reducing the prevalence of middle ear disease (otitis media) and related hearing loss in Indigenous children, and to investigate whether the use of swimming pools by school-age children results in the reduction and possible prevention of otitis media.

The study was triggered by the much-publicised findings of Western Australian researchers that the provision of swimming pools in two Indigenous communities in remote semi-arid Western Australia significantly reduced skin and some ear disease in children.

The claims of the WA study appeared to be good news in the bleak area of chronic infections in Indigenous children. However the limitations of the WA study, principally the absence of control communities, small participation numbers and short duration, signalled the need for further investigation of the results.

Four new, Commonwealth funded, saltwater chlorinated swimming pools provided an opportunity for the more definitive study over three years. Between 2009-2011, 813 Anangu children and adolescents were assessed between one and six times in their schools during biannual visits (a total of 2107 assessments). At each visit multiple measures of hearing and ear health were recorded and each child was assessed by an ear, nose and throat specialist. Forty five percent of the children were assessed on at least 3 occasions.

The outcomes of this research demonstrate that on all clinical measures (audiological and medical) there is no significant effect of swimming pools

on ear health or hearing. Additionally there is no evidence that access to swimming pools results in improved school attendance.

However, the participants in this study were all school-age children and adolescents. Regular use of saltwater chlorinated swimming pools by younger pre-school children might result in reduction in the formation of antibiotic resistant biofilms in those children with otitis media with fewer years of otitis media chronicity and conductive hearing loss.

This possibility was not investigated in this study.

Also, during the course of the research there were anecdotal comments from adults who live and work in the Anangu communities with pools that they observed improvements in the skin disorders of the school-age children. This was one of the reported areas of health improvement in the work by Lehmann et al. (2003).

The study did not look at this either, but it is important for future studies as skin infections are of major concern because they can lead to chronic heart or kidney disease later in life.

The study recommendations include:

- That swimming pools in Indigenous communities continue to be promoted as a valuable community resource for their broader benefits to physical health as well as social well-being.
- Encourage greater use of the swimming pools by much younger children as this may assist in preventing the establishment of early nasopharyngeal and middle ear pathologies that are so difficult to effectively treat in remote communities.
- There appears to be need for further research into the effects of swimming pools on the skin disorders of Indigenous children in remote communities.
- The retention of the 'No school No pool' policy within the mix of strategies to optimise school attendance which are deemed to be appropriate for a locality and its school.

Go online to splashmagazine.com.au to get a QuickLink to the full report.

The tide's coming in

These intriguing flippers aren't a high fashion accessory for synchronised swimmers. They're actually a conceptual art work by Belgian artist Paul Schietekat. He's made them in four colours: orange, red, blue and black, and they represent a humorous take on the challenges of global warming and the consequent rise of sea levels.



UK study: recreational swimming doesn't cause asthma

The UK body, the Pool Water Treatment Advisory Group (PWTAG) requested an updated view from the Committee on the Medical Effects of Air Pollutants (COMEAP) on whether using chlorinated swimming pools poses a risk of developing asthma.

Recent advances in the scientific understanding of how asthma develops suggest that such a link might be plausible. However, epidemiological (population) studies of recreational swimmers provide less support for the idea that swimming in chlorinated pools can result in new cases of asthma than was the case when COMEAP last reviewed the available data in 2007.

The results from cross-sectional studies are mixed. Although many report associations of asthma with use of chlorinated swimming pools, particularly in atopic individuals (those with a tendency to show allergic responses), others did not find an increased risk of asthma or respiratory allergy to be associated with swimming in chlorinated pools.

Overall, PWTAG considers that the epidemiological evidence provides less support for the suggestion that recreational swimming causes the development of new asthma than was the case when COMEAP last commented on this issue in 2007.

However, the evidence for plausible mechanisms by which irritant disinfection by-products (such

as chloramines in swimming pools) could cause asthma has increased, particularly given the current understanding of the role of the airway epithelium in the development of asthma.

Their evaluation has focussed on the public health implications of recreational swimming rather than potential effects on elite swimmers. The studies on elite swimmers that they reviewed suggest that some characteristics of the airways of elite swimmers are different from those in the general population. They have not evaluated the extent to which such differences might be attributed to the use of chlorinated swimming pools, nor their implications for the likelihood of developing asthma.

While the new mechanistic evidence reinforces the biological plausibility of a causal relationship in initiating new asthma in individuals who previously had not experienced the disorder, we are of the overall view that the epidemiological evidence linking recreational swimming to asthma is now less suggestive of a causal association than was the case in 2007.

Nonetheless, they reiterate the Committee's previous advice that management of swimming pools should keep levels of disinfection by-products as low as is consistent with adequate anti-microbial activity.

Go online to splashmagazine.com.au to get a QuickLink to the full report.



Global news

ABC News reports the swimming pool, spa and fountain of the JW Marriott Hotel had been drained in August, following an outbreak of Legionnaires' disease. The report said the hotel and the Chicago Department of Public Health (CDPH) were notifying the 8500 guests who stayed between July 16 and August 15 of the health risk. Since August 14, the CDPH had received reports of eight confirmed cases of Legionnaires' disease among people who visited the hotel during this time frame, including two deaths linked to the disease, suggesting that the hotel is the common exposure setting. The CDPH strongly believes there is currently no ongoing health risk at the hotel.

Never mind "Modern Family", if you have two dads in Virginia, USA, you may be refused entry at the local pool. Roanoke Health Club owned by the regional medical provider Carilion Clinic, refused a two-year old boy entry to the swimming pool because his "two dads" don't constitute a family in Virginia. However, a petition signed by more than 142,000 people convinced the club to amend the family membership criteria.



Image credit: Paul Graves, www.paulgravescreative.com

Historic fountain refreshed

The City of Sydney has restored the 150-year-old John Baptist Fountain, one of the earliest and most historic locally made sculpted sandstone fountains in Sydney. Over the years it had been damaged by tree roots, moved to build Sydney's underground train network and damaged by vandals; but now it is flowing again in all its glory.

Tenders of the month

Pyrenees Shire Council

Two tenders for the Beauport Swimming Pool

Tender No. 2012/019A: swimming pool vinyl liner and associated works

The works under this contract consists of Supply, fabrication, preparation and installation of a commercial grade vinyl liner and associated works to the pool.

Tender No. 2012/019B: swimming pool concourse works

The works under this contract consists of concourse widening and reconstruction, replacement of stainless steel ladders and associated works to the pool.

Formal pre-qualification or pre-registration does not apply to this contract.

Pyrenees Shire Council
Phone: (03) 5349 1100
Web: www.pyrenees.vic.gov.au

Closing date: 12 noon, Friday 14th December 2012

Ku-ring-gai Council

Request for Tender

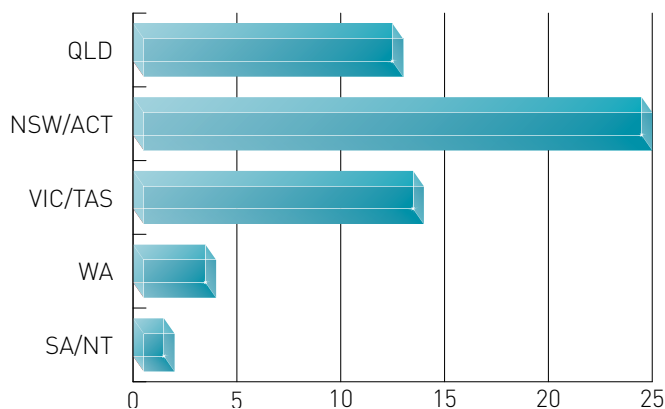
Tender No. T67/2012

Management of the West Pymble Aquatic and Fitness Centre.

Interested parties are required to register via www.kmc.nsw.gov.au to download documents.

Closing Date: 2.30pm, Tuesday December 18, 2012

National aquatic tenders



New construction, management and maintenance tenders and EOIs for aquatic centres and commercial swimming pools for August to October 2012.

Funding

Councils return on risky investments

At the beginning of the global financial crisis, 13 New South Wales councils lost nearly \$30 million in high risk investments. The funds invested were due to pay for community assets including swimming pools.

In 2010, the councils brought an action against the distributor of the derivatives, Local Government Financial Services (LGFS), demanding the money be returned as they were not iron-clad as promised, despite Standard & Poor's assigning them the highest possible AAA rating.

Now, a ruling from the Federal Court has ordered damages be paid to the councils after a

finding that the councils were misled about the "grotesquely complicated" derivatives and the level of risk.

The Court ruled that the investment bank that created the derivatives, ABN Amro, Standard & Poors and the LGFS were negligent, and share the damages. Standard & Poors plans to appeal.

The councils include Parkes, Moree, Narrandera Shire, Cooma-Monaro, Orange, Bathurst, Ryde, Corowa, Murray Shire, Oberon, Deniliquin, Eurobodalla and Narromine.

There is potential for this ruling to influence other jurisdictions globally.



World's tightest ride

Wet'n'Wild has unveiled Australia's first Constrictor slide, which takes riders through the world's highest banking triple 360-degree coils. The Constrictor features 166 metres of red and yellow snaked themed slide which has riders hitting speeds of up to 30kmh.

Appointments

New staff for Swim Australia

Swim Australia has made two new appointments. The recently created position of SwimSAFER and SwimPRO manager has been filled by industry all-rounder, Cameron Speechley. A competitive swimmer, skilled swim coach, active swim educator, and an owner and manager of several successful swim schools over the past two decades, Speechley now adds Swim Australia officiate to his list of lifelong industry contributions.



Cameron Speechley



Jasmin Forsyth

Also, a new media manager has been appointed. Jasmin Forsyth is a seasoned media professional, a proud mum and a former competitive swimmer. She's also personally experienced the trauma of a childhood pool accident.

"I was about three years of age, and was busy helping mum clean the pool," she says. "Mum turned momentarily to un-kink the hose, and in that time, I had managed to leave her side, slip on the top stair of our in-ground pool, and simply slide to the bottom," Forsyth says.

"Within seconds, mum had pulled me from the pool, and despite the splutters and shaken nerves, I was fine. It's certainly a life lesson – no matter how cautious you are, accidents can and do happen, so always be prepared!

"That's why I'm so eager to help spread Swim Australia's potentially life saving, water safety and learn-to-swim messages, and assist our mission in ensuring Australian children SwimSAFER in, on and around water."



Development

GCAC to be revamped for Pan Pacs

The existing Gold Coast Aquatic Centre (GCAC) will make way for a new world class facility to host the Pan Pacs in 2014 before becoming the venue for the swimming and diving competition for the Gold Coast 2018 Commonwealth Games.

The deal was finalised after the Queensland Government and Gold Coast City Council agreed to share the \$41m cost.

The project will include a new 10-lane, 50-metre competition pool, new learn-to-swim pool, elevated spectator concourse/viewing terrace, new change room, gym and toilet facilities,

community meeting rooms, event facilities, permanent seating for approximately 1000 people and refurbishment of the existing eight lane 50-metre pool and dive pool. It is expected the new facilities will cater to more than double the current annual community usage, from 170,000 visits to 400,000.

Construction is likely to commence in February 2013 and expected to take approximately 16 months. The new Gold Coast Aquatic Centre will open to the community in Spring 2014 following the Pan Pacific Swimming Championships.

BECOME AN NSPF[®] INSTRUCTOR

Train to be a certified instructor for the National Swimming Pool Foundation[®], the leading educator of those who care for pools and spas.

As a certified NSPF[®] Instructor, you will lead the way in helping others learn how to ensure public health and safety at all commercial pool facilities.

The NSPF[®] Instructor course is aimed to verify ability and mentor candidates to successfully conduct our Certified Pool/Spa Operator[®] (CPO[®]) certification course and other aquatic training courses designed for commercial pool/spa operators. You will enroll in a class of just five students, learning teaching methodologies and practices, visual aids construction and utilization, course administration and NSPF[®] requirements.

Successful instructor school candidates earn access to all NSPF[®] materials at wholesale prices, annual meetings at trade shows, webinars and the World Aquatic Health[™] Conference.

Healthy Pools.
Healthy Bodies.



Join our growing international team of certified instructors.

ENROLL TODAY!

UPCOMING CLASSES

Course Date	Location	Registration Deadline
May 17-19, 2013	Republic of Singapore	Mar 29, 2013
Oct 14-16, 2013	Indianapolis, Indiana	Sept 6, 2013
Oct 2013	Barcelona, Spain	Sept 6, 2013

Learn more at www.nspf.org.

Email: silvia.uribe@nspf.org,

SKYPE: Silvia.Uribe1

Exports

Quenching the thirst for water technology

Brisbane based water technology company, Australian Innovative Systems (AIS), is growing its export business in one of the world's most difficult environments: the water starved region of the Middle East.

AIS is predominantly known for designing and manufacturing chlorine generators for water disinfection, used in a variety of industries especially the commercial and residential swimming pool industry.

The company is celebrating its 20th year in business by increasing its export markets to 53 countries.

In particular, AIS's technology has been recently employed in two high profile Middle Eastern projects: the Grand Hyatt Hotel in Dubai and Al Forsan Inter-

national Sports Resort Lakes in Abu Dhabi, and is in discussions regarding further projects.

AIS director Elena Gosse says that in 2007, her company set its business sights firmly on the Middle East, in particular the UAE, in recognition of the critical water supply issues inherent to the region.

"Although many people associate the UAE with lavish architecture and luxurious shopping, the reality is that water is the real luxury. Four-fifths of the country is desert and subject to serious water supply and resource issues.

"In some areas there is also the problem of poor water management due to overuse by industries such as agriculture. The undersupply and overuse issue is a severe social, economic and

environmental threat. For many people, there is limited access to sanitary water and for those who do have it, it can be prohibitively expensive," she says.

"Progressive businesses in the region are looking to countries such as Australia for innovative, cost-effective water treatment solutions."

AIS's business journey into the Middle East has been a rapid one. By 2008 they had modified their leading Australian salt water chlorine generator (marketed as Autochlor) to better suit the harsher environmental and higher salinity water conditions of the region.

Autochlor uses only salt, water and electricity to produce sterilised water suitable for use in swimming pools, water parks, water features and the like.

The company's innovation was rewarded that same year with a prestigious Silver International Gaia Award, a Dubai-based awards program which honours environmental sustainability in the construction industry.

By 2009, AIS had developed the world's first in-line, on-site chlorine generator (marketed as Ecoline) capable of producing sterilised, potable water from fresh water utilising the minute amounts of minerals and salts already present in the water. Ecoline's applications include drinking water treatment, food processing plants, water features, cooling towers, fresh water swimming pools and irrigation water. Ecoline won the Gold Gaia Award in 2009 and the SPLASH! Environmental Sanitisation Award in 2010.



The Waterzone Pool System

Introducing the Ultimate Pool Renovation System
Recently Installed at Parkes Swimming Centre
Tel 029604 8396

Pools Plus E robert@hydrocarepools.com.au



Queensland Trade and Investment officials Susan Rae (second from left) and Ray Matta (far right) with AIS's Elena Gosse (far left), Alex Volobuev (back), Roman Orlingis and Kerry Gosse at the Tingalpa facility

In 2012 as part of the Project Qatar trade mission, the company met with several new business prospects. One was Protec, a Qatar-based, specialised industrial and technical engineering company offering products and services to a vast array of clients in the Gulf Region.

AIS and Protec signed an agreement in September 2012 for Protec to market and sell AIS's products.

Gosse said that AIS would continue to target business in the Middle East as well as large scale Australian projects such as chlorine generation for the swimming pools required for the 2018 Commonwealth Games.

Contact: www.aiswater.com.au

THE GAME CHANGER



Hybrid



- Hydro electric powered
- Scans like a robot
- Active scrubbing



GREAT VALUE
RRP
\$849
inc GST

Watch the Video

Using QR app



Dolphin Hybrid



1300 MYDOLPHIN
www.maytronics.com.au

the world's oldest
landscaped water garden

Sigiriya



Photos by Jack Maher

Sigiriya Rock is famous for its past, present and even future.

In the present, it is considered one of Sri Lanka's Ancient Wonders. It attracts many thousands of tourists each year who enjoy the view following the 1202-step climb to the top, and often partake in wild elephant safaris in the adjacent national parks.

As for the future, Colombo-based speculative fiction writer Arthur C Clarke set the Rock as the location for his famous "space elevators" in *Fountains of Paradise*. That was his fantastic idea about transporting people and goods up to orbiting space stations via fixed 36,000km long elevators. It's a strange idea that scientists now consider actually has some merit to enable cheaper space travel – a long time in the future, of course.

But the Rock's main claim to fame is its history – including its place as home to nearly 100 swimming pools and ponds and an incredible series of

fountains as part of the world's oldest landscaped gardens.

The pools, fountains and gardens were built by King Kasyapa in the fifth century AD as part of his development of the Rock as a fortress: his Palace in the Sky. Having killed his father to assume the throne, he needed a place to protect himself from his vengeful brother. The fortress was surrounded by three rings of crocodile-infested moats, and was manned by guards who balanced on the edges of the rock – an automatic punishment if they fell asleep was to fall to their deaths.

But Kasyapa spent most of his time on the ground level, laying in resplendent bliss in his water garden, watching his 500 wives bath in the shadow of the Rock.

Not satisfied to merely watch his real wives – who hailed from all over Asia and even Africa – he also had detailed and colourful portraits of each of them painted on the side of the Rock. According to the ancient history found scribed





After his demise, Buddhist monks took over the Rock and turned it into a monastery. They destroyed most of the immodest images of Kaspaya's wives, but couldn't reach some that were in a cave in the side of the rock, where an inscription also tells the story of Kaspaya.

The Rock is a significant local landmark and can be viewed for many kilometres around.

It makes a highlight of the local Sigiriya Hotel, which like Kaspaya's ancient home, boasts a series of pools at the centre of tranquil and beautiful garden. The main pool has a variegated pattern of blue, white and aqua 6-inch ceramic tiles. It uses locally made Centric equipment including two sand filters and two cast iron 5kW pumps made by the 107 year old company, Jinasena in Colombo Sri

Lanka. There is also a 300mm deep wading pool/reflection pond to set the scene for Sigiriya rock. Both pools use chlorine sanitisation and soda ash for the pH.

On the other side of the Rock is Geoffrey Bawa's famous Kandalama Hotel. He was Sri Lanka's most famous architect and the most renowned exponent of tropical modernism. There are three pools in Kandalama, and two have views of the Rock – although it is relatively small in the distance compared to the view from the Sigiriya Hotel.

The pools are all painted concrete, use chlorine at 1.3ppm. They feature wet-edge steel grates on two sides and all pools fit into the natural theme of the hotel, where it is designed to be comfortable for people, while blending seamlessly into the environment. ■



next to the pictures, this was so he could see them in the reflection of his pools. The frescoes were painted on a highly polished, mirrored surface. The plaster topcoat was made from what at the time was a very advanced mixture of ground termite nest, ground rice and clay.

But his most amazing construction was the series of gravity-fed fountains, which was built using extremely sophisticated hydraulic technology considering it was 1600 years ago.

Water was manually moved to the top of the Rock where it was kept in large storage pools. When released it flowed down channels cut in rock and through clay pipes and brickwork conduits, then underground until it reached a series of circular limestone plates with symmetrical perforations.

The water then shot up several metres in the air, creating a royal spectacle and cooling the hot Sri Lankan day.

Despite the obvious disrepair of most of the infrastructure, the fountains still work to a small degree during the wet season, when heavy rain will see them bubble up about one metre.

Unfortunately for King Kasyapa, his brother gained his revenge and defeated him in battle. According to varying versions of events, he then either took his own life or was poisoned by his Queen.



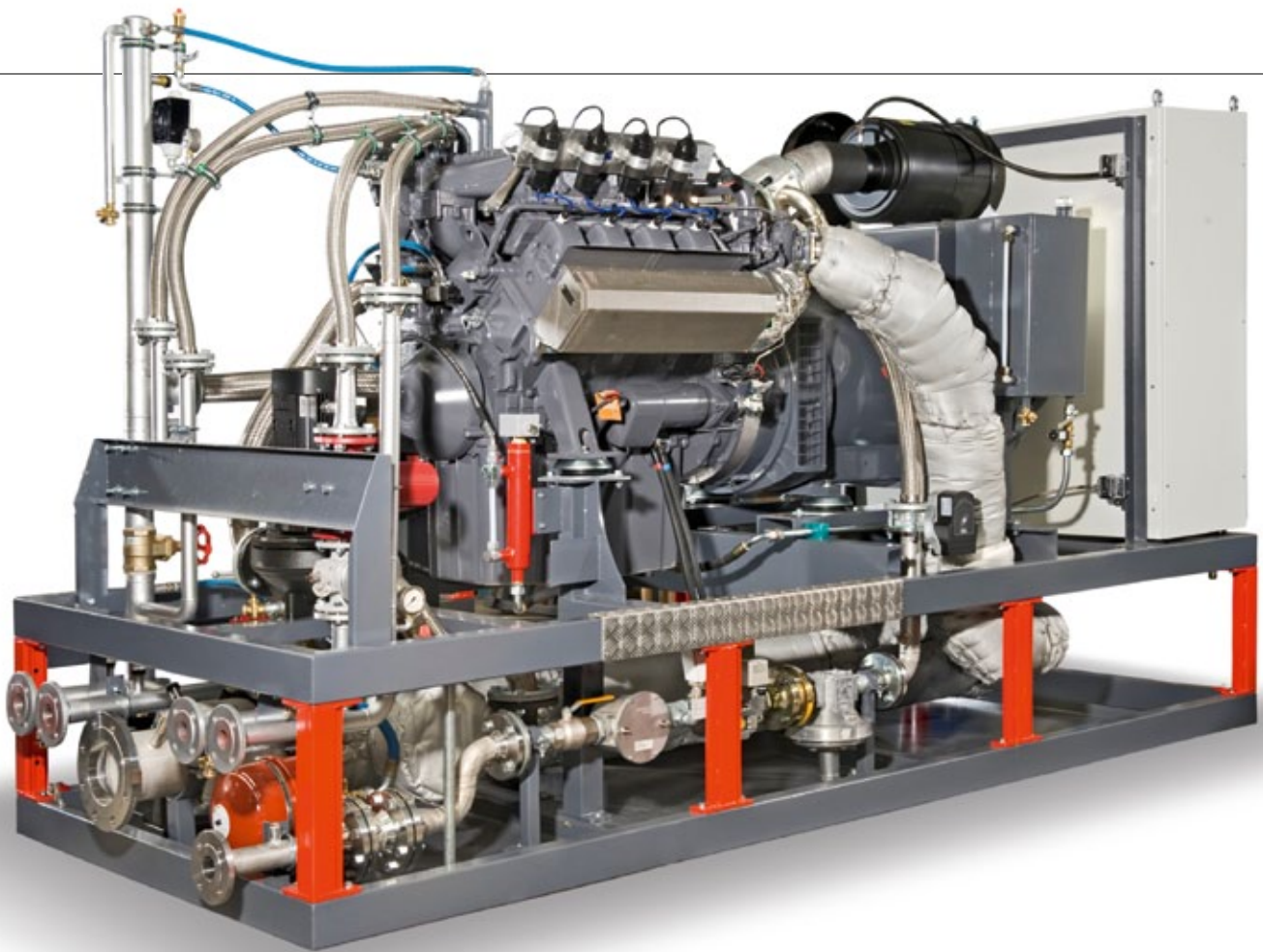
1. The imposing edifice of Sigiriya Rock framed by the Sigiriya Hotel garden and pools

2. One of the pools at Kandalama, with Sigiriya Rock in the distance

3. Part of King Kaspaya's water gardens, now waterless in the dry season

4. One of the fountains where gravity-fed water shot several metres in the air. An amazing achievement for 1600-year-old technology

5. Detail from the surviving frescoes of his wives. Their immodest nature led to most of them being destroyed by the monks



Cogeneration

doubling the output to cut the cost

The pressure has never been greater to reduce running costs in aquatic centres. Rising electricity prices and shrinking budgets mean that consultants and management have to look for reductions in power bills wherever they can find them.

One relatively new method – in Australia at least – is cogeneration.

SPLASH! spoke with a couple of experts in cogeneration and also looked at a Sydney aquatic centre installation to get a handle on the technology, and see what affect it can have on the bottom line.

Cogeneration & microgeneration

SCE Energy Solutions provides renewable energy systems. Monique De Martin from SCE explains cogeneration and trigeneration.

Cogeneration is also known as combined heat and power (CHP). It is the simultaneous production of electricity and heat from a single fuel source. Cogeneration uses natural gas to generate on-site electricity and waste heat from a reciprocating gas engine.

The waste heat is captured to provide heating for uses such as potable hot water, space heating and process heat for swimming pools and similar applications.

Aquatic centres are increasingly looking for environmentally friendly solutions to supply their energy needs.

By generating electrical power on-site, losses associated with electrical power transmission are reduced and the waste heat energy produced can be used for heating and cooling. This is micro cogeneration. Micro generation systems offer a higher overall efficiency than typical conventional electrical power generation, achieving reduced energy consumption, reduced CO₂ emissions and reduced energy costs.

While the typical efficiency of central generation is around 35 per cent, micro CHP technology is more than twice as efficient and can achieve efficiency up to 85 per cent.

Trigeneration

Trigeneration takes cogeneration one-step further. As the name suggest, trigeneration is the production of three energies: electricity, heat and chilled water. Chilled water is achieved by incorporating an absorption chiller into a cogeneration system. Absorption chillers take the waste heat from a cogeneration plant to create chilled water for cooling a building.

Introducing an absorption chiller into a cogeneration system means that the site is

able to increase the operational hours of the plant with an increased utilisation of heat, particularly in summer periods.

Where there is interest in cogeneration technology it is quite normal to conduct a thorough feasibility study taking into account heat demand, heat losses and electricity tariff structure.

SCE-Energy Solutions can provide a comprehensive report and feasibility study for installing a cogeneration plant at a particular site. They have access to technical manager Henryk Sliwa who has been involved in the industry for more than 10 years and has wide experience in the technology and completed many major installations.

Castle Hill RSL

Castle Hill RSL Club's C2K Aquatic Centre is one of Sydney's largest multi-purpose leisure and activity centres, set in the burgeoning Hills District with its diverse population with a reputation for keeping fit.

The centre is open year round and offers facilities for everyone, ranging from toddlers to 50-plus groups, participating in activities covering swimming to fitness classes, gymnasium activities and strength training.