



WORLD PLUMBING COUNCIL EDUCATIONAL SCHOLARSHIP 2010 REPORT



With IOPSA & PIRB delegates, Two Oceans Aquarium Conference Centre, Cape Town

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With Chris Burgess, President of IOPSA at a Cape Town Branch of 'Plumbink', Plumbing Merchants, strong supporters of IOPSA & PIRB

1. INTRODUCTION

I was privileged to be the recipient of the WPC 2010 educational scholarship, which took me on an amazing trip to Cape Town, South Africa for three weeks in August 2011. Cape Town is the second largest city in South Africa originally developed by the Dutch East India Company in the 17th century and the provincial capital of the Western Cape Province. Cape Town is a modern and vibrant city that was welcoming and very friendly. My main aim was to make contact with the South African plumbing industry and report key findings in a presentation to the WPC Conference in Edinburgh, Scotland and to produce this written report.

My arrival in Cape Town got off to a good start with a warm welcome at my hotel and the local community. The hotel was situated near the centre of the city and well placed for conducting my research and sightseeing, with my hotel room view looking to Table Mountain. The city is a mixture of old and new architecture with many historic buildings and artefacts concerning British and Dutch settlement. A visit to Table Mountain was a wonderful experience which will never be forgotten, as was Robben Island the prison home of Nelson Mandela the former South African President for 18 of his 27 year incarceration.

“During the many years of incarceration on Robben Island, we often looked across Table Mountain at its magnificent silhouette... To us on Robben Island, Table Mountain was a beacon of hope. It represented the mainland to which we knew we would one day return.”
Nelson Mandela

My main contact in Cape Town was Mr Lee Goldie, Vice President of IOPSA. Lee has been in the plumbing industry almost thirty years and runs Drips Plumbing a maintenance business that serves the inner suburbs of Cape Town. Lee also has strong family links with the plumbing industry with his brother and Lee’s father, Mr Tony Goldie, who was a founder member of IOPSA in 1989. We were also joined from Johannesburg, by Mr Chris Burgess, President of IOPSA.



Discussing all things plumbing, with Chris Burgess (President IOPSA) & Lee Goldie (Vice-President IOPSA)

2. IMIZAMO YETHU TOWNSHIP

My visit to the township of Imizamo Yethu was a memorable experience. Only twenty five kilometres from the Cape Town CBD, the 18 hectare settlement houses over 33,000 people, with little or no infrastructure for sustainable living. The settlement has dismal water supply and sewerage facilities. There are very few toilets and no sewerage system. The Disa River which runs through this settlement has the highest level of e-coli bacteria that has ever been recorded in South Africa. Cholera outbreaks are not uncommon, especially in young children.

When visiting the Township a guide is a must. It is certainly not a place where you would consider exploring on your own, in saying that all the residents that we met were very friendly and welcomed us into their homes. Our guide for the day was Michael. He was originally from the Township, but his parents died when he was quite young and was brought up by a British family that had moved to South Africa to start a new life. This gave Michael an opportunity to access education and at this time is still studying at the local university. He continues to support his community by providing educational awareness to South Africans as well as international visitors; this hopefully will improve living and educational conditions for his people.



Township children welcome us



A typical hot water installation ☹



With my township guide, 'Michael'



Township local shop

3. FALSE BAY COLLEGE

Accompanied by Mr Lee Goldie, I visited False Bay College, (Westlake Campus) Plumbing Department and was greeted by head plumbing lecturer Mr Patrick Dreyer. This is the main college for plumbing training in the Cape Town area. I was very impressed by the theoretical and practical set up of the plumbing department and the college in general. Their mission statement is a great template for any education and training organisation;

'To develop people by serving as a gateway to employment, small business development, and higher education for the community. We firmly believe that our students must become an asset to our society and have lifelong access to education'

The college offers competency based modular training for apprentices in the plumbing trade up to NQF level 4 and be eligible to register with the Plumbing Industry Registration Board (PIRG). Their training methods focus strongly on the practical application of plumbing requirements in water supply, drainage, sanitary and sheet metal work. After a prescribed duration of practical work experience, coupled with theoretical qualifications, the student can apply for a trade test.

Operatives in the trade who have some years of practical experience, but do not have formal qualifications may arrange for an evaluation assessment at Westlake Campus, followed by a trade test to prove competency. This may include a two or three day practical assessment program, followed by the trade test.



At False Bay College (Westlake Campus), presentation to Head Plumbing Lecturer Mr Patrick Dreyer of 'Plumbing in Good Hands' a historical publication on the development of the plumbing industry in Western Australia. Also, a plumbing theory class give me a few minutes of their time



4. TWO OCEANS AQUARIUM PRESENTATION

Another major highlight of my trip was being invited to conduct a presentation to a wide range of plumbing delegates at Two Oceans Aquarium Conference Centre, Cape Town. My presentation concerned *'Advanced Plumbing Education and Licensing Requirements in Western Australia'*. I was overwhelmed at the turnout and participation of some 115 delegates. The attendance was made up of a wide range of industry delegates including plumbers, plumbing suppliers and manufacturers. I was one of three presenters, the other presentation concerned *'The Future of Plumbing in South Africa'* presented by the PIRB and *'Plumbing Legislation Changes'* presented by IOPSA / Cobra Watertech. The evening proved a great success with much interaction with the audience.



My presentation to industry delegates at the Two Oceans Aquarium Conference Centre, Cape Town



Discussing plumbing matters after the conclusion of the technical presentations



5. PLUMBING INDUSTRY REGISTRATION BOARD (PIRB)

The Plumbing Industry Registration Board work proactively to promote plumbing practices that protect the health and safety of the community and integrity of the water supply and waste water systems by providing a comprehensive registration system for plumbers and monitoring the performance of plumbers. The role of the PIRB is as follows:

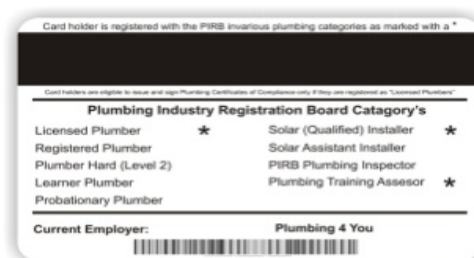
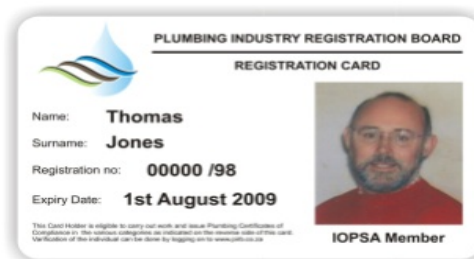
- To effectively administer a live and updated plumbing registration system in South Africa
- To promote and encourage the upliftment of the training and skills development at all levels in the plumbing sector, in terms of the National Qualifications Framework (NQF)
- To promote, monitor and maintain expertise and competencies among industry professionals
- To work with the community to address concerns and resolve complaints about work carried out by plumbers
- To monitor compliance to technical standards of plumbing work through professional industry plumbing inspectors and there by assisting authorized local and central government bodies with the enforcement of plumbing compliance
- To promote plumbing practices that protect the environment, the health and safety of consumers; and the integrity and sustainability of the water supply, waste water, hot water heating and solar water heating systems; through the application and enforcement of South African National Standards and Codes of Practice
- To actively promote and support a consistent and effective regulatory environment throughout South Africa
- To regularly consult and liaise with the plumbing industry and with authorized bodies related to the industry, in an open forum free of any political or commercial agenda for the discussion of matters affecting the plumbing industry and the role of plumbing for the safety and well being of the whole community and protecting the integrity and sustainability of the water supply and waste water systems

Increasingly more Metropolitan councils, Local authorities and Insurance Company's require that any person working on plumbing works within their jurisdiction must be registered with the Plumbing Industry Registration Board. It is illegal for any person who works on plumbing installation if he/she is not a qualified plumber or not working under the adequate supervision of a qualified plumber.

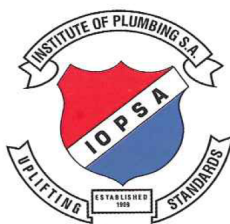
There are numerous people who call themselves plumbers in the South Africa, but sadly not all of these plumbers hold qualifications or experience. Qualified plumbers are vital to sanitation, clean drinking water and the control of disease. Many of us could not go without the luxuries of hot water and a proper flushing toilet, but yet plumbers are held in a very low regard by some people. This problem is partly caused by the “bakkie” or “cowboy” trades-person who tarnish the reputation of professional plumbers, endanger public health, cause damage to properties, produce poor installations and have a total disregard for plumbing standards. The problems consumers face in trying to find a competent plumber will only get worse as the shortage of skilled trade’s people deepens.

The PIRB believes that compulsory registration will help make the “bakkie” element obsolete, as all people wanting to be part of the plumbing industry will have to meet certain criteria before being allowed to operate in the industry. Benefits of registration include:

- Be recognised as a professional trade's person
- Increase Consumer Confidence
- Identification Card
- Uplifting Standards
- Uplifting Plumber Training
- Taking responsibility



A typical plumbing PIRB registration card. Note: This plumber is qualified as a licensed plumber and also has endorsements as a solar installer and plumbing training assessor.



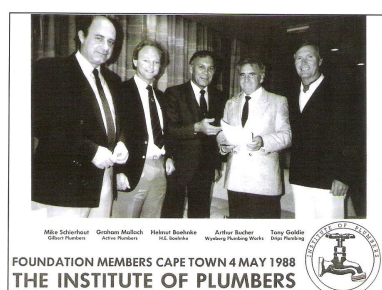
6. INSTITUTE OF PLUMBING SOUTH AFRICA (IOPSA)

The Institute of Plumbing is represented by three distinct groups, namely, Plumbers, Plumbing Merchants, and Manufacturers. Their concern as a group is to work together as one in ensuring the best practice plumbing methods are used, products are of a high standard, and that plumber members are suitably trained to perform this task using compliant products and engineering practices.

The Institute exists for the interests of plumbing and through this, the health and safety of all the people of South Africa, as well as preserving the environment through water conservation and using resources efficiently and effectively. Whilst each group may have their own needs to meet and discuss matters pertaining to their businesses, the Institute provides the platform to promote the practice of plumbing.

The Institute of Plumbing South Africa (IOPSA) began as a small group of 14 plumbing companies. Today, this figure has grown to 756 plumbing companies, which represent more than 3,500 qualified and licensed plumbers and 10,000 semi-skilled operatives. Their major goal is to set and maintain a national plumbing standard in order to ensure that quality plumbing products and installation services prevail. This will benefit both plumbing companies and consumers.

IOPSA represents the country at the World Plumbing Council, and has recently become a member of the 'Proudly South African' promotion campaign. Furthermore, IOPSA has been given the honour of chairing the Standards Generating Body, which represents plumbing training and certification nationwide at the Construction Education and Training Authority (CETA).



Inaugural meeting of foundation members of IOPSA 4 May 1988, Cape Town & the current President & Vice-President of IOPSA, Chris Burgess & Lee Goldie

7. CONCLUSION & RECOMMENDATIONS

In conclusion, my visit to Cape Town, South Africa and my subsequent presentation to key delegates at the World Plumbing Conference, Edinburgh, Scotland was an unforgettable experience. I feel extremely honoured to have received this prestigious award and to be the first recipient to deliver a report presentation to senior delegates at a World Plumbing Conference. To add to this, the welcome and assistance I received in South Africa was second to none.

I was very impressed with the organisational set up of False Bay College, PIRB and IOPSA, and the strong working relationship they have developed. The South African Plumbing Industry is moving forward in very safe hands. Furthermore, the interaction of plumbers, suppliers and manufacturers is excellent, with major plumbing supplier Plumblink providing fantastic support to the PIRB, IOPSA and the general plumbing industry. Both the PIRB and IOPSA are working hard to have a fully regulated industry where, hopefully soon, no plumber will be able to practice the trade without the appropriate registration and insurances. This will greatly reduce poor plumbing practices, including the sometimes fatal 'cowboy' mains pressure hot water installations.

With the recent and exciting announcement that Cape Town is to host the 2016 World Plumbing Council Conference, what achievable outcomes can be attained over this five year period? From my personal observations;

- I. A licensing structure protected by legislation, whereby no plumber can operate and offer plumbing services without the appropriate license issued by the PIRB. This may include refusal of advertising services such as yellow pages, newspapers, etc, unless proof of holding a current plumbing license is confirmed
- II. Township community Improvements are currently underway with the construction of a new school, and the removal of some of the poorest dwellings, being replaced with small modern 'bungalow' type homes. Could this work be complimented by a funded project to improve water supply, sanitary and drainage plumbing to the township community? Maybe funding could be raised through government, (local/federal) or a World Health Organisation project
- III. Development of a backflow prevention policy, to protect the drinking water supply from contamination of cross connection hazards. This may be commenced at relatively low cost with a containment program, where the water supplier's main is protected with a device at the property boundary, thereby preventing possible contamination of the water supplier's main. The fitting of these devices could coincide with the consumer meter being replaced through damage, or a scheduled exchange program. On smaller domestic type meters the backflow device can be an integral part of the meter assembly. I would be happy in assisting any interested organisation to develop such a scheme.

.....*'Tot ons weer ontmoet'*.....



8. ACKNOWLEDGEMENTS

In compiling this report, I would like to thank the following organisations for their kind assistance:



The World Plumbing Council (WPC)



Institute of Plumbing South Africa (IOPSA)



Plumbing Industry Registration Board (PIRB)



Training & Apprentice Employment
DIVISION OF MPA GROUP

MPA Skills



DIVISION OF MPA GROUP

Master Plumbers & Gasfitters Association WA (MPGA)