

28 February 2014

The Research Director,
State Development, Infrastructure and Industry Committee
Parliament House
George Street
Brisbane Qld 4000

Submission no. 072

28 February 2014

11.1.15

To the Research Director,

Thank you for the opportunity to make a submission to your inquiry into the *Water Supply Services Legislation Amendment Bill 2014*. This submission will focus on the changes enabling authorised persons appointed by a water service provider to install certain water meters.

Services Trades Queensland (STQ) is an industry representative organisation that advocates and represents Service Trades' employers and employees of the commercial plumbing, mechanical services (air-conditioning) and fire protection industries. STQ represents around 100 companies along with their thousands of employees. The services trades sector is worth over \$2.6 billion to the Queensland economy and employs tens of thousands of people.

STQ welcomes the Government's overarching priority to eliminate business and government roadblocks that restrict improvements in productivity, that restrict the government's capacity to reduce needless bureaucracy and business cost, and that hold back the creation of jobs, wealth and improved standards of living for all Queenslanders.

STQ does not support the current form of the proposed amendment whereby the Legislation would enable unqualified and unlicensed persons to undertake water meter installations.

As representatives of the major industry stakeholders, there has been no credible evidence provided of any benefits that might arise from the changes to water meter work. Notwithstanding the recent consultation, no agency has provided analysis or evidence that the amended legislation would lead to any substantive reduction in business or Government roadblocks or bureaucracy that would result in a real reduction in costs, or that would help lift productivity.

An underlying motivation behind this proposed change is that a small number of Water



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Services providers and Councils have been utilising un-licensed and un-qualified people to install and maintain water meters in breach of the Plumbing and Drainage Act 2002. This work has been performed in an illegal manner, and the regulator has failed to ensure compliance with the Act.

STQ eagerly looks forward to the Parliamentary Committee applying a more forensic approach to analysing what, if any, benefits will flow from the proposed changes, and concurrently assessing the range of potential risks to the community and impact on the predominantly small Queensland plumbing businesses that will be impacted by these changes.

It is important to note the enormity of this issue. Brisbane City Council figures advise that there are approximately 21,000 water meter installations per year. Extrapolated out, there is a likely 60,000 to 80,000 installations across Queensland per annum. Maintenance and repair work to water meters is in addition to this.

STQ's concerns with the proposed amendments fall under six broad categories:

- * the level of qualification;
- * the relevant training package;
- * the clarity of legislation;
- * failure to meet cost reduction objectives;
- * increased business complication; and
- * health and safety concerns.

Appropriate Level of Qualification:

The legislative amendments proposed enable the installation of a new water meter to be undertaken by a person authorised under the *Water Supply (Safety and Reliability) Act 2008*. A person can become an authorised person if:

- The service provider is satisfied the person has the necessary expertise or experience to be an authorised person; or
- The person has satisfactorily finished training approved by the service provider.

STQ is not aware of any requirement upon a service provider to state or justify what necessary expertise, experience or training it requires. The result of this amendment in real terms is complete self-regulation by Water Service Providers. This is unacceptable to STQ and the broader plumbing industry.



For the past two decades, the Commonwealth, States and Territories together with Industry have worked collaboratively to build this country's national vocational training system aligned to industry skills needs, high quality competency standards, and the development of nationally recognised and portable skills and qualifications.

By enabling the approximate 80 Water Service Providers and Councils to determine individually the types and levels of skills and what-ever training they require, without specification against minimum national qualifications or standards, will inevitably result in inconsistency in the skills and ability of workers, a lack of transferability of skills, and attendant risks to potable water supply.

STQ has undertaken extensive consultation with its relevant stakeholders and found that the overwhelming majority support a Certificate 3 level plumbing based qualification being required to perform the work in question. The Certificate 3 is appropriate for numerous reasons including:

- It provides a graduate with the ability to undertake the installation correctly and to a high standard;
- It provides a graduate with the ability to understand the impact of an installation upon the broader plumbing infrastructure;
- It provides a graduate with the ability to assess the public risk as well as health and safety impacts of work;
- It is a level of qualification accepted by the community as deeming a tradesperson competent to undertake work in Queensland; and
- A certificate 3 provides vital knowledge of relevant codes and Australian Standards that must be complied with under the law.

STQ supports the requirement that persons installing water meters hold a Certificate 3 plumbing based qualification and a regulated licence.

Appropriate Training Package:

STQ is aware that some Water Service Providers employ persons trained in qualifications contained within the 'Water Operations' training package at Certificate II and III levels. These qualifications are designed for people working in non-potable water systems, such as irrigation.

As discussed earlier, there are around 80 Water Service Providers in Queensland, including local governments. The national vocational training system, which is strongly driven by industry, believes it is critical for the continuation of nationally consistent training



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for important vocational occupations including water workers. Without agreement by Government as to minimum standards, then it is foreseeable that in a very short time, there would be little consistency or transferability of skills in the sector.

STQ has completed a mapping exercise between the *Certificate III in Plumbing* qualification under the *Construction, Plumbing and Services Training Package (BCP08)* and the qualifications under the *Water Training Package*.

STQ can confirm there are no other qualifications other than the *Certificate III in Plumbing* that provide the full requisite training with respect to water meters for potable supply.

The *Certificate III in Water Operations* does provide a person with the competency level to mainly undertake monitoring work. It provides some training in the area of 'trades work' through units such as: '*install meters for non-potable, non-urban water supplies*', '*maintain meters for non-potable, non-urban water supplies*' and '*monitor and conduct minor maintenance of complex flow-control and metering devices*'.

There is also, within the *Certificate II in Water Operations*, several introductory level units including '*install and repair water services*', '*install and replace basic volumetric metering equipment*' and '*install basic metering equipment, flow control and regulating devices*'. These units do not specifically relate to water meters, rather are designed to provide an overview of metering systems including water, gas or steam.

However these competencies do not give a graduate the ability to understand the plumbing work of potable water devices; installing complex metering devices; the ability to interpret how the work impacts on the broader infrastructure; and nor does it cover potential electrical components of this work and other like complications. Further, the qualification is mostly restricted to non-urban and non-potable situations.

By comparison, the *Certificate III in Plumbing* covers all of these elements and includes units such as: '*set out and install water services*', '*install and adjust water service controls and devices*', and full health and safety aspects of both performing the work and potential consequences of the work.

The following competency units are from the current *Certificate III in Plumbing* training package and comprise the necessary competencies for installation of water meters, in addition to any particular Water Operations units specified any the service provider.

These courses, which have been selected from the 'water' stream of the course, would be deemed essential to provide a water industry worker with the appropriate skills for installing water meters for potable water supplies, and to assess the potential impacts of their work.



Core subjects

CPCPCM2040A	Read plans and calculate plumbing quantities
CPCPCM2041A	Carry out WHS requirements
CPCPCM2046A	Use plumbing hand and power tools
CPCPCM2047A	Carry out levelling
CPCPCM2050A	Mark out materials
CPCPCM2052A	Weld using oxy-acetylene equipment
CPCPCM2054A	Carry out simple concreting and rendering
CPCPCM3022A	Weld polyethylene and polypropylene pipes using fusion method
CPCPCM3023A	Fabricate and install non-ferrous pressure piping
CPCPWT3021A	Set out and install water services
CPCPWT3022A	Install and adjust water service controls and devices
CPCPWT3023A	Install and commission water heating systems ¹
CPCPWT3027A	Connect irrigation systems from drinking water supply
HLTFA211A	Provide basic emergency life support ²

Elective subjects

CPC CST2005A	Carry out load slinging of off-site materials
CPCPWT3028A	Install water services
CPCPWT3029A	Install water pipe systems

STQ supports the utilisation of a plumbing based training package and nationally recognised qualification to skill workers to undertake water meter installations in line with STQ's other recommendations.



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Clarity of Legislation:

STQ has received considerable feedback that the legislation is unclear. It is aware of elements of industry as well as the water supply industry that genuinely believe the proposed amendments will allow unlicensed people to install sub-meters.

We note that the Bill's explanatory notes state that the installation of sub-meters for multi-unit complexes will continue to require a licence and that an authorised person will only have authority to install the main or master meter on the service provider's infrastructure. While it is understood that the legislation itself provides some exemptions, it is our firm view that these exemptions are not clear and it is likely that attempts will be made to exploit this lack of clarity.

We further note that the explanatory notes state 'there is a lack of clarity between the provisions of the *Plumbing and Drainage Act 2002* and the *Water Supply Act* about whether the installation of water meters is plumbing work that may only be carried out by licensed plumbers.'

There is little doubt, given industry feedback, that the drafting of these changes do not meet the goal of clarifying the law.

While STQ does not support unqualified and unlicensed persons installing water meters it does consider that the plumbing industry, Water Service Providers and the community would benefit from explicitly stating in legislation that a plumbing licence is required to install sub meters.

Failure to Meet Cost Reduction Objectives:

The government has stated that it is an objective of the Bill to reduce costs. STQ has been advised that there are cost-saving estimates associated with this Bill, however have not during any of the associated consultation been provided with any evidence to quantify or validate the claims of this cost reduction.

There are two primary ways in which the Water Service Providers will undertake this work, either through internal employees (non-licensed water workers or licensed plumbers) or through contracting external suppliers.

In relation to the first (internal employees), STQ believes that any cost saving assertion would be flawed. A review of the relevant industrial award shows that Urban Utilities pays a water service worker \$35 per hour compared to \$29.06 paid to a plumber. Logan City Council is currently paying a water service worker \$30.06 per hour compared to a plumber who is receiving \$26.33 per hour.



In relation to external providers of this service STQ is aware that tendered out to a large service provider it is extremely unlikely that there will be a cost saving when compared to engaging a local plumber or small business plumbing firm.

These figures and analysis demonstrate that it will be more expensive for a non-plumber to install water meters rather than licensed plumbers. Additionally, if it is the case that there is a possible cost saving from this measure, Water Service Providers have not guaranteed to pass on this saving to customers.

STQ does not support to assertion that there will be costs savings to Water Service Providers or to consumers because there has been no credible evidence provided to support this claim. If it is proven that cost savings are available, the STQ would recommend the Parliamentary Committee ensure a guarantee that such savings be passed onto consumers.

Proposal will Increase Business Complication:

STQ has undertaken extensive consultation with its member contractors regarding the business impacts of the proposed amendments. This consultation has found the impacts to be negative. Many concerns were raised relating to adding complexity to the tender process, warranty issues and builders or developers requirements.

Currently, the majority of water meter installations undertaken by STQ member contractors are tendered as part of the broader plumbing package for the project. Separating this small section of work out will add another layer of difficulty to an already complex process and have other follow on impacts for the projects.

These impacts include warranty issues. STQ businesses provide warranties or guarantees for the work they have undertaken; this includes the initial installation as well as the ongoing performance of water meters. STQ's member contractors will no longer be able to offer these warranties as the work would be undertaken by a person with poor qualifications or no qualifications at all.

STQ members consider that builders and developers will attempt to hold them accountable for the water meter's ongoing performance as it is considered part of the plumbing scope of work. This is an unfair situation with company's believing they will be the first point of



contact when a water meter fails and that their reputations and the reputation of the broader industry will suffer as a result.

Additionally, as the Committee would be aware, it is standard practice with the Queensland Construction Industry for builders and developers to seek guarantees that their individual company procedures and expectations are complied with. This extends to the building program that schedules work. STQ member contractors have raised concerns that unqualified and unlicensed persons will not understand these demands. Further, they are concerned about potential delay to their own work resulting from this lack of understanding.

STQ supports the installation of water meters being undertaken by persons trained in a qualification that the construction industry has confidence in.

Health and Safety Risks:

The risk of contamination is an ever-present one for our water supply. There is no doubt that the defective design or installation of water meter assemblies may result in soil, recycled water or sewerage entering the supply. This then creates the risk of potentially fatal water born viruses, bacteria and parasites in drinking water.

A cross connection is when a non-potable substance enters the potable drinking water supply. These incidents are mainly related to the installation and configuration of the water meters. Cross connections lead to foreign chemicals including metals, pesticides and contaminants such as salmonella, giardia and E.Coli entering the water supply.

There have been recent incidents of cross connections in Queensland. In the Pimpama-Coomera area in 2009 over 630 homes were impacted by a cross connection and residents were unable to drink tap water for four days. In 2010 Gold Coast Water found at least 8 cases of cross connections due to incorrect water meter installations / configurations. Five of these meters were found to be installed by unlicensed persons with the remaining three installed by unknown persons.

Cross connections have also occurred in New South Wales, in one circumstance where approximately 12,000 homes were affected, and Victoria as well as numerous other events overseas.

An additional issue is that the incorrect installation of a meter will lead to pooling of water around the meter. This water easily becomes contaminated with pet excrement, legionella or pesticides. A drop in main pressure (possibly from a burst main) will then suck this water into the supply, where it can quickly spread into a household and/or neighbouring



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property. A situation where incorrectly trained persons are installing water meters increases the likelihood of these incidents occurring.

A most recent example of cross contamination occurred in Redcliffe in January 2014 where a major Water Service Provider allegedly instructed its non-licensed water workers to connect a sewerage pipe into a stormwater drain. Allowing sewerage to run into the stormwater drains along a street and likely runoff into a local waterway or Moreton Bay. This was witnessed by a licensed plumber who caused the matter to be referred to the Plumbing Regulator.

These types of incidents form part of the around 5,700 complaints and almost 200 water incident complaints made against Queensland Urban Utilities alone in the last 3 years. These numbers are likely to increase as the skill levels decrease.

It is noted that the Public Health Act provides a managerial level safety guard against deliberately placing unsafe drinking water into the water supply. However, currently there is an additional 'on-the-ground' safeguard in the form of licensed plumbers. These amendments propose to remove this secondary safeguard and increase the risk to consumers.

STQ supports certificate 3 level training with a licence outcome to mitigate against the health and safety risks outlined.

Finally, STQ has been advised of the Government's view that no other States have the requirement for licensed plumbers to install water meters. This appears incorrect with Western Australia having very similar requirements for all potable connections to water meters and New South Wales for all connections over 50mm.

STQ is aware of assertions within Government that there is a skills shortage within the plumbing industry leading to difficulties in sourcing plumbers in some regional areas. This is contrary to industry experience and research. As the Committee would be aware building and construction work has generally been in decline recently which has led to a surplus supply of licensed plumbers. STQ has attached a regional breakdown of plumbing licensees across the State which demonstrates a spread of plumbers across Queensland. Although some areas do not have licensed plumbers, STQ would argue that these areas would require most qualified tradespersons to be sourced from elsewhere, including those employed by Water Service Providers. Further, most of these areas do not have water supply infrastructure.



It is the clear view of the plumbing industry in Queensland that allowing persons that have either no training or training that the Services Trades industry does not have confidence in, will undermine the integrity of the water supply.

STQ thanks the Committee for its consideration of this submission.

If you have any enquires please contact me on donna@stqld.com.au or 07 3277 4963.

Kind regards,



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Services Trades Queensland



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Regional Breakdown:

	30 May 2013	MPAQ	
	*Included with Cairns	*Included with Cairns	
Aurukun			
Balonne	5	5	0%
Banana	164	100	64%
Barcaldine	14	14	0%
Barcoo	1	1	0%
Blackall - Tambo	5	5	0%
Boulia	2	2	0%
Brisbane	3064	2648	16%
Bulloo	1	1	0%
Bundaberg	322	274	18%
Burdekin	41	34	21%
Burke	2	2	0%
Cairns	662	582	14%
Carpenteria	4	3	33%
Cassowary	84	73	15%
Central Highlands	117	104	13%
Charters Towers	33	27	22%
Cherbourg	-	0	
Cloncurry	6	5	20%
Cook	14	9	56%
Croydon	-	0	
Diamantina	1		0%
Doomadgee	-	0	
Etheridge	-	0	
Flinders	10	8	25%
Fraser Coast	319	274	16%
Gladstone	282	250	13%
Gold Coast	2239	1943	15%
Goondiwindi	18	13	38%
Gympie	143	124	15%
Hinchinbrook	40	36	11%
Hope Vale	-	0	
Ipswich	470	405	16%
Isaac	48	42	14%
Kowanyama	-	0	
Lockhart River	-	0	
Lockyer Valley	90	80	13%
Logan	728	626	16%
Longreach	9	8	13%
Mackay	480	428	12%
Mapoon	-	0	
Maranoa	68	57	19%
McKinley	1	1	0%
Moreton Bay	1166	998	17%
Mornington	-	0	
Mount Isa	53	46	15%
Murweh	15	14	7%
Napranum	-	0	
North Burnett	26	26	0%
Northern Peninsula	3	3	0%
Palm Island	-	0	
Paroo	5	4	25%
Quilpie	5	2	150%
Redlands	662	552	20%
Richmond	4	3	33%
Rockhampton	358	299	20%
Scenic Rim	159	107	49%
Somerset	51	9	467%
South Burnett	104	88	18%
Southern Downs	96	81	19%
Sunshine Coast	1580	1250	26%
Tablelands	145	125	16%
Toowoomba	504	441	14%
Torres Strait	17	15	13%
Townsville	710	625	14%
Weipa	36	27	33%
Western Downs	93	85	9%
Whitsunday	176	156	13%
Winton	7	6	17%
Woorabinda	2	2	0%
Wujal Wujal	-	0	
Yarrabah	-	0	
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