



Plumbing and Drainage Bill 2018

Submission 012

Public Works and Utilities Committee  
Queensland Parliament House  
George Street  
BRISBANE QLD 4000  
PWUC@parliament.qld.gov.au

Dear Committee,

The Plumbers Union Queensland proudly supports the Bill currently being considered by the Committee and thanks the Committee for the opportunity to provide a written submission on this matter. Further, we would appreciate the opportunity to present to the Committee should hearings be held.

The Plumbers Union strongly believes that there is no doubt that not passing this Bill in its current form will put the Queensland community at risk.

For too long we have played a game of chance with lifesaving equipment like medical gas pipelines and vital services such as the sanitised air to emergency wards and surgery theatres. It has been luck and luck alone that has meant we have not yet experienced the fatalities that have occurred in other States.

For over 20 years the entire industry has been calling on the Government to step up to the plate and stop rolling the dice with people's lives. New parents and newborns in Queensland deserve to have the peace of mind that the person who installed the medical gas pipelines in our hospitals are skilled as well as qualified and that the Government has done everything it can to ensure what occurred at Bankstown Hospital does not happen to them.

We would like to take this opportunity to thank the Government and Minister de Brenni for progressing with these proposals, many of which are the result of decades of campaigning by plumbers, plumbing contractors, their families and the wider community. We understand that there are those in this debate that will do nothing but support the status quo. This disappointing approach to public policy neglects the fact that these reforms will improve the health and safety of Queenslanders, the situation for workers on the ground as well as the businesses that employ them right across our State.

The Union has been involved with the extensive consultation sessions throughout Queensland. We attended sessions in Cairns, Townsville, Logan, the Gold Coast and Brisbane. We were proud to be a part of the thousands of people who had their say on this matter. We were also proud to see that the mechanical services licence and WaterMark reform provisions were overwhelmingly supported; we did not experience a single negative response to these two areas of reform in any of the consultation sessions.

We need strong Services Trades sectors of Plumbing, Fire Protection, Mechanical Services, Roofing and Gas. People that spend their entire career in the weather, doing long hours to build Queensland deserve a legislative framework that supports them, their careers and the businesses that employ them. We are pleased to support this Bill because it will do just that.

In particular we would like to express our strong support for:



- Mechanical Services Licensing;
- Medical Gas Licensing;
- Reforming Queensland's adoption of WaterMark to consider outlawing anyone, anywhere in the world, being able to put together bathroom PODs regardless of how unskilled they are and bring them into Queensland homes.

## Licensing Matters

### Safety

The safety of our members is paramount. The construction industry is inherently more dangerous than many other industries, with employees working alongside heavy machinery and often at height. Employees place their safety on the line every day, as even the safest construction workplace still presents risks.

According to the most recent data from Safe Work Australia, serious injuries in the construction industry average 6.4 working weeks off work (44.8 days), and a median compensation payment of \$11,000. These figures have grown steadily over the past decade indicating that the safety of workers should be the primary consideration when broaching the subject of productivity in the construction industry.

It is facts like these that underscore and motivate the Union's support for appropriate licenses for the Mechanical Services and Medical Gas areas. The unsafe nature of this work means that the minimum qualification of a license structure is fundamentally needed.

### Mechanical Services:

The Plumbers Union Queensland strongly supports a Mechanical Services License being introduced in Queensland. We consider that the proposed Scope of Work as well as the Land Use Application appropriately reflect tasks that Mechanical Services Plumbing is required for.

The Mechanical Services Plumbing License must be included within the purview of the Services Trades Council, within the QBCC, to ensure that its regulation, oversight and general policy framework remains consistent with the other services trades of plumbing and fire protection.

We note that in Victoria the Mechanical Services License was introduced by a Liberal Government through the Building Act and Plumbing Regulations. In 2008 the Regulation was reviewed and reaffirmed.

We consider that it is appropriate for the Certificate III in Plumbing (Mechanical Services Stream) as this qualification is directly tailored for persons seeking to undertake the scope of work as defined in the fact sheet. Additionally, this will bring the mechanical services sector into line with its 'sibling' services trades of sanitary plumbing and fire protection. This qualification is currently being delivered in Queensland.

We, as a Union, do not support anyone currently undertaking this work not being able to continue to do so. As such we consider that all workers who are able to display they are currently working in this sector or be given an appropriate period of time to transition via proving their skills. All new entrants into the industry should be required to undertake the relevant Certificate III.



We consider that this may impact around 1,000 people that currently undertake this work in commercial construction and a small number of people that perform part of this work in a domestic context. All of who should be given time to have their skills recognised including if they chose to only continue to perform the small scope of work they currently do. If any person is unable to successfully complete a trade test they should not be undertaking this work.

Mechanical Services work is complex, vital and significant. It includes:

Air-conditioning that controls the temperatures, air quality and exhaust in areas like:

- operating theatres;
- kitchens (including commercial kitchens);
- health facilities;
- labs;
- universities;
- prisons;
- hospitals;
- schools;
- Large scale boilers;
- Cooling towers that hold water tanks up to the size of half an Olympic swimming pool (most large facilities have many cooling towers);
- Significant length of pipework (which in any other situation would be considered regulated plumbing work).

It is simply not acceptable, given the nature of this work, that an unskilled and unlicensed person is able to perform this work.

The most common problems that occur in the mechanical services area are;

*Legionella*: a bacterium that is dangerous to persons with a weak or compromised immune system. It is most likely that Legionella would be bred in cooling waters and spread through duct, vents and pipe. It is also possible that systems not working correctly could suck up Legionella and spread it throughout the system. NSW Health advises that Legionella Pneumophila can contaminate air conditioning cooling towers. Examples of Legionella are common and regularly reported in the media. Reports have stated an average of around 324 Legionellosis notifications per year across Australia. Key cases have included:

- Sydney Town Hall in 2016 where 4 people were hospitalized as a result of legionella spreading through the air conditioning.
- Melbourne Aquarium in 2000 where there were 4 deaths, 95 people were hospitalised and 125 cases were confirmed, the infection was traced to the cooling tower; reporting on this incident quoted Dr John Carnie as saying; "Air conditioning systems provide a powerful means of transmitting the disease through the droplets of water sprayed from their exhausts and then innocently inhaled by unknowing victims."
- Wollongong Hospital in 1987 experienced 10 deaths.



*Resource wastage:* If installation occurs on a subpar level or incorrectly it is highly likely that it will run inefficiently, leading to significant additional running costs and unnecessary energy consumption, increasing on emissions: causing climate change. Incorrectly fitted or joint failure in duct is likely to result in an infestation. It is clear that if incorrectly installed Mechanical Services Work has the ability to:

- Present threats to public health and safety;
- Damage the environment;
- Increase costs; and
- Cause first or third party property damage.

Although Queensland currently has a small level of protection for consumers through the contractor level license it's highly inappropriate that such a high-risk and complex area of work should only be afforded such minimal protection. Why should it be good enough to licence a business owner with a trade qualification and not the workforce?

Similar trades to Mechanical Services protect the public through an Occupational License, such as plumbing, fire protection and electrical work it is clear that for the reasons outlined Queensland must adopt an Occupational License and a minimum qualification.

We are pleased that; all major mechanical services companies, the Air-conditioning and Mechanical Services Contractors Association, as well as the Master Plumbers Association of Queensland support this sensible and logical proposal.

#### Medical Gas

The Plumbers Union supports Medical Gas work becoming licensed work within Queensland. We have been strong advocates of this for some time. The recent tragic event in Bankstown Hospital in New South Wales underscores just how important this matter is. It is clearly unacceptable that medical officers who have no training in the installation or workings of this pipework and associated work are signing off the work as meeting the Australian Standards.

The two main risks that exist in this area are the possibility of fatal cross connections and the contamination of pipelines. The later occurs with pipelines are not maintained correctly causing the pipelines to become contaminated which results in the failure of equipment. This may also be fatal.

The Union thanks the Government for acting in this important area. We note that the relevant competency units are part of the Certificate III in Plumbing Mechanical Services stream and as such graduates should be licensed to undertake medical gas work. Further, a licensed Plumber that has graduated from a different stream but completed 'Install Medical Gas Pipeline Systems' (CPCMS3034A) which is a three to four day course for experienced persons should also be able to undertake this work. We also support transition provisions for persons currently working in this area; including a period of time for them to prove their abilities or upskill.

#### WaterMark

The Plumbers Union Queensland does not support using WaterMark to abolish all accepted regulation within the plumbing trades. The National Certification Scheme is overstepping its' mandate of single components, and adopting standards for entire rooms is a new challenge facing our State-based



regulation and therefore requires a State-level decision. We support the approach to this matter as outlined in the Bill.

The entire Queensland community clearly expects that the plumbing work done in their bathroom has been performed by a skilled, qualified and licensed plumber. This is a fact that we as a society have accepted, promoted as well as encouraged and rightly so. However, the national WaterMark certification scheme is undermining this community safety net and accepted standard.

Currently this issue is focused on bathroom PODS being installed in Queensland that have been constructed by unlicensed persons. However, it is clear that this matter will not be exclusive to just bathrooms. Therefore the ability for the responsible Minister to consider each new WaterMark standard, and whether it is appropriate on an issue by issue basis, is the right approach.

It is clear that the ability of unskilled persons, anywhere in the world, to undertake regulated plumbing work in a bathroom POD represents not only an unacceptable health and safety risk to the community it also goes further than self-certification and is the deregulation of a significant portion of the plumbing trade. This deregulation is occurring in a sector where the community expects the work to be undertaken by a skilled, competent and licensed person.

In its attendance at many roadshows the Plumbers Union representatives heard only 1 person speak in favour of the current arrangements and numerous people speak against this deregulation.

As a Union we understand there is a drive to undertake offsite construction and fabrication. This is the reality of the future of building and construction. However, there are two clear and separate issues here. The first issue is off-site work (which this Bill has nothing to do with) and the second issue (which the Bill does address) is the complete deregulation and deskilling of the plumbing trade, which we strongly oppose.

It is simply not true to state that the current system as set down through WaterMark is exclusively the facilitation of off-site work. Any off-site work should be performed by skilled labour as it would have to in any other relevant circumstance.

Any advocate who states that this is simply a matter of advancing and facilitating off-site fabrication is simply incorrect.

We oppose the fact that right now there is no qualification or skill level required to undertake work that if it were not being performed on a WaterMarked POD, would be regulated plumbing work.

The WaterMark scheme was originally supported by the industry, within a limited scope, and it is unfortunate that this scope is no longer respected by WaterMark. For example this limited scope allowed the manufacturing of hot water systems, which is largely robotic, and other similar products.

Recently WaterMark has over-stepped their industry supported scope and adopted a technical standard for the certification of Bathroom PODs, an entire bathroom, and its associated plumbing work. The WaterMarking of an entire room does not fall within the scope of certification supported by the plumbing industry.



The plumbing industry is strongly opposed to the ability to WaterMark a room as a product. The prefabrication of rooms presents a new challenge to Government, which requires a policy decision. The plumbing industry contends that the best way to address this evolution is to include prefabrication work within the licensing system. This clearly and optimally protects the health and safety of the Queensland consumer, while meeting their clear expectations.

It is clear to the plumbing industry that this is the deregulation of this large aspect of regulated plumbing work.

The Union now holds fear for works that relate to:

- Mechanical;
- Fire;
- Electrical;
- Waterproofing; and
- Gas.

It is our contention that no relevant plumbing stakeholder has ever supported the WaterMark Scheme, to enable the mass certification of entire sections of buildings. This fact is smashing the industry's confidence in the WaterMark Scheme.

It is obvious that the result of this change is the loss of a significant amount of plumbing employment as well as a dramatic deskilling of the plumbing trade. This fact is embodied in the WaterMark Certificate Code 23248, Australian Modular Fabrications Pty Ltd. This Code does not comply with AS3500 nor does it comply with similar Standards, Codes or Regulations.

What is happening is likely to expose Australian's to an increased amount of non-conforming or non-compliant products. It is well known that the systems we use to monitor and check imported products has not kept up with the market, and non-conforming products have been installed as a result. The importation of fully assembled bathroom PODs must require the work to be undertaken by skilled and licensed persons. This is the cheapest way to protect the Australian consumer.

The other relevant consideration (when reviewing the risks of leaving a growing and high risk part of the market beyond the reach of the Plumbing Regulations and relying on an imperfect product certification scheme) is the need to ensure Australian markets do not become seen internationally as having lower quality standards than other potential destination markets in our region. The strategic identification and infiltration of what are perceived to be low barrier markets is increasingly commonplace as international trade is freed up. This poses significant risks to consumers in those markets who are exposed to sub-standard products and systems. A robust plumbing regulatory framework, one that is sufficiently broad enough to capture all high-risk (and so regulated) plumbing work, is key to ensuring we avoid becoming a dumping destination market, and all the consumer and public health risks associated with that.

During the consultation roadshows, Union Representatives have already advised of the vast problems that are occurring with the PODs being delivered on site now. This includes: PODs not being tested to the appropriate standard, plumbing companies having to invest significant resources to fix PODs once they appear on-site and are defective, the significant fire protection risks PODs are causing and the



ongoing liability issues. For example, if a POD is WaterMarked by one company but appears defective on-site and fixed by a plumber from another company then:

1. Is the Plumber allowed to fix it?
2. Does this void the Consumer Protection Warranty?
3. What is the status of the untouched work if the WaterMark is void? Does it become unlicensed work?
4. Where does responsibility lay for each individual piece of work?
5. What now requires a local government inspection or form?

This state of affairs borders on the ridiculous as it is clearly unworkable. Right now anyone, anywhere in the world could be assembling the plumbing in a bathroom POD getting it ready to be shipped into Queensland and installed into an unsuspecting family's new apartment or home. Consumers rightly expect that this work is being undertaken by a person with the socially accepted and legislated level of qualifications and skills.

This work should not be undertaken by unskilled, unqualified and unlicensed people. The Union supports the definition within the Standard Plumbing and Drainage Regulation being amended to remove the ability for Bathroom PODs to be a certified item in Queensland; along with any other associated amendments required.

The Union thanks the Committee for taking the time to consider our submission as well as our official's and our member's input at the consultation sessions.

*Other areas of the Bill:*

- (41) We support the creation of an online register to make it harder for people to get away with being unlicensed on construction sites across the State.
- (46) We support the concept of the creation of a guideline to supervise apprentices. However, the drafting of this guideline is an urgent matter and must occur in consultation with the relevant industry stakeholders (those actually involved with the supervision elements not Local Government). We would support this guideline being drafted ASAP.
- (205) We do not support continuing the ability for unskilled and unlicensed persons to be able to replace or repair the metering device that is a fundamental part of connecting a home's safe drinking supply to the mains. Water Service Providers do not disclose who they deem as Authorised Persons, they do not disclose whether they even require a minimum qualification and there is no investigation or accountability structure in place for this work. The justification of this 'race to the bottom' was lowering costs. However, as we all know water bills for Queenslanders have continued to sky rocket. This work must be included back within the plumbing licensing regime in order protect the health and safety of our community.

Should you require any further information please contact our office on [REDACTED]

Yours sincerely

# PLUMBING AND PIPE TRADES EMPLOYEES UNION

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*Our Pipelines Are Your Lifeline*



*G O'Halloran.*

Gary O'Halloran  
State Secretary Plumbers Union Queensland