

7, 2018

Committee Secretary
Transport and Public Works Committee
Parliament House
George Street
Brisbane Qld 4000
tpwc@parliament.qld.gov.au

Dear Committee,

Thank you for the opportunity to provide a submission on the draft Plumbing and Drainage Bill.

I am currently employed by a Refrigeration and Air Conditioning company & have a Certificate IV Training & Assessment also. My experience in this industry, leads me to have concerns about the impact current and recommended licencing currently has, and will continue to have, on the safety of those trades people and apprentices employed in the industry. My concern is also for the job security of support staff employed in the Refrigeration and Air Conditioning industry in the event of changes having implications on the profitability of businesses.

The industry's workplace environment is currently unsafe as a direct result of Certificate II split installers, workers who have no real understanding of refrigerated systems operating at high pressure, their refrigerants, nor the ability to provide installations to meet energy efficient star ratings. The draft bill would see split systems excluded "Unsubstantiated and harmful to Queenslanders" in the proposed refrigeration and air conditioning licence and goes on to further increase unsafe working environments by failing to ensure mechanical services plumbers cannot work on any refrigerated systems, all which operate at high pressure and inclusive of CO2 as a refrigerant. Below is a List of Core Competencies Refrigeration & Air Conditioning Tradespeople need to complete to be Qualified. I find it hard to believe that we will be Supervised by other Trades when they have less skills & knowledge or background experience.

Foundation

- UEENED101A Use computer applications relevant to a workplace
- UEENEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace
- UEENEE142A Apply environmentally and sustainable procedures in the energy sector

Stage 1A

- UEENEE102A Fabricate, assemble and dismantle utilities industry componentsMandatory
- UEENEE103A Solve problems in ELV single path circuits
- UEENEE105A Fix and secure electrotechnology equipment
- UEENEE107A Use drawings, diagrams, schedules, standards, codes and specifications

Stage 1B

- UEENEE102A Prepare and connect refrigerant tubing and fittings
- UEENEE103A Establish the basic operating conditions of vapour compression systems
- UEENEE108A Recover, pressure test, evacuate, charge and leak test refrigerants

Stage 2A

- UEENEEJ194A Solve problems in low voltage refrigeration circuits
- UEENEEE137A Document and apply measures to control OHS risks associated with electrotechnology work
- UEENEEJ153A Find and rectify faults in motors and associated controls in refrigeration and air conditioning systems

Stage 2B

- UEENEEC025B Participate in refrigeration and air conditioning work and competency development activities Mandatory
- UEENEEJ106A Install refrigerant pipe work, flow controls and accessories
- UEENEEJ107A Install air conditioning and refrigeration systems, major components and associated equipment Elective
- UEENEEJ110A Select refrigerant piping, accessories and associated controls

Stage 3A

- UEENEEP012A Disconnect/reconnect composite appliances connected to low voltage installation wiring
- UEENEEP017A Locate and rectify faults in low voltage composite appliances using set procedures
- UEENEEP024A Attach cords and plugs to electrical equipment for connection to a single phase 230V supply
- UEENEEP025A Attach cords, cables and plugs to electrical equipment for connection to 1000V a.c. or 1500V d.c. supply

Stage 3B

- UEENEEJ104A Establish the basic operating conditions of air conditioning systems
- UEENEEJ111A Diagnose and rectify faults in air conditioning and refrigeration systems and components
- UEENEEJ113A Commission air conditioning and refrigeration systems
- UEENEEJ170A Diagnose and rectify faults in air conditioning and refrigeration control systems
- UEENEEJ174A Apply safety awareness and legal requirements for hydrocarbon refrigerants
- UEENEEJ175A Service and repair self contained hydrocarbon air conditioning and refrigeration systems
- UEENEEJ178A Apply safety awareness and legal requirements for ammonia refrigerant

Stage 4 Capstone

- UEENEEJ109A Verify functionality and compliance of refrigeration and air conditioning installations

The draft bill is unacceptable in its current form and requires significant changes to ensure licencing is aligned correctly with required skills. Failing to do this exposes every Queenslanders to unsafe environments, in the home, at the office, at school, in hospital, and when shopping. Mechanical Services SwitchBoards dedicated to HVAC SHALL NOT be entered by untrained Personell.

Refrigerated systems are a part of our everyday lives. If not amended, this bill will clearly demonstrate the government's disregard for their obligation to ensure the basic safety of every Queenslanders.

Refrigeration and air conditioning is a stand alone trade. It is not plumbing and neither is it electrical. I challenge this government to produce evidence of the required skills to work on refrigerated systems, inclusive of air conditioning by either mechanical services or electricians. To date all evidence has been ignored which should see an occupational Refrigeration and Air Conditioning Licence with no monetary threshold under the QBCC.

The standard of training has reduced significantly, with many workers limited to learning only split system installations and soft drink fridges. Job growth predictions are poor with ARMA citing only 34 new jobs over a 5 year period. Some electrician's skills are diminishing because they are predominantly installing split systems. In Victoria, plumber's skills are diminishing due to time invested in split system installations. Victoria is looking long term at a standalone refrigeration and air conditioning licencing model, yet here is QLD wanting to implement a system that Victoria are admitting is flawed.

Tasmania has acknowledged the need for split installations to be installed by trade qualified refrigeration and air conditioning tradespeople, acknowledging the changes toward increasing the use of natural refrigerants.

The draft bill is confusing, unclear and even suggests ductwork is not included in a proposed licence for my industry.

Substandard air conditioning installations have become a burden on energy providers. The very same providers who reap the massively increased financial benefits of unnecessarily high energy bills to Queenslanders. The best solution our government has to offer to all Queenslanders, is to not turn on inefficient air conditioning systems.

To sum up the situation, we have a draft bill that further impedes the reduction of greenhouse emissions policies of federal government, provides unsafe environments for every Queenslanders, unaffordable energy bills, and excessive demands on energy providers and very low industry confidence for viable businesses in this industry.

I urge the committee to demand the following;

1. An occupational licence for the refrigeration and air conditioning trade under the QBCC, inclusive of all refrigerants and inclusive of split systems.
2. Including hydrocarbon refrigerant to ensure QLD can meet the federal governments international agreements.
3. No monetary threshold for any works.
4. The licence to be inclusive of ductwork and associated incidental work such as roofing.
5. A mechanical services plumber licence which excludes work on all refrigerated systems and Mechanical Services Switchboards dedicated to HVACR.

Regards
Brendon

Brendon McEwan

