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9 April 2021

Attention: A/g Assistant Secretary Improving the telecommunications powers and immunities framework
Rachel Blackwood
A/g Assistant Secretary, Spectrum and Telecommunications Deployment Branch
Department of Infrastructure, Transport, Regional Development and Communications
GPO Box 594
Canberra ACT 2601

Dear Ms Blackwood,

SUBMISSION: AMENDMENTS TO THE TELECOMMUNICATIONS CARRIER POWERS AND IMMUNITIES FRAMEWORK – TRANCHE ONE

Seqwater is a:

1. Statutory Authority of the Queensland Government established under the *South East Queensland Water (Restructuring) Act 2007*;
2. a registered service provider of critical infrastructure in South East Queensland; and
3. 'public utility' as that term is defined in Schedule 3 of the *Telecommunications Act 1997* (**the Telco Act**).

Seqwater is one of Australia's largest water businesses with the most geographically spread and diverse asset base of any capital city water authority in Australia. Our operations extend from the New South Wales border, to the Toowoomba ranges and north to Gympie. We manage up to $12 billion of bulk water supply infrastructure and natural catchments of the region's water supply sources to ensure a reliable, quality water supply for more than 3 million consumers. Seqwater has an extensive network of dams, plans, pipelines and associated infrastructure across South East Queensland.

Seqwater is under a legislative duty pursuant to:

- the *Water Supply (Safety and Reliability) Act 2008 (Qld)* and by reference to the *Australian Drinking Water Guidelines* (published by the National Health and Medical Research Council and the Natural Resource Management Ministerial Council);
- the *Public Health Act 2005 (Qld)* and the *Public Health Regulations 2018 (Qld)*; and
- the *Security of Critical Infrastructure Act 2018 (Cth)*,

to provide (at all times) safe, secure, resilient and reliable bulk drinking water for South East Queensland.

It is also under other legislative duties and in particular:

- the *Work Health and Safety Act 2011* (Qld); and
- the *Work Health and Safety Regulation 2011* (Qld),

which includes harmonisation (Commonwealth) and safety in design and all of its relevant components.

Seqwater also provides essential flood mitigation services and supplies water for irrigation to rural customers, manages catchment health and offers community recreation facilities. Seqwater is also responsible for the long term planning of the region's future water needs, a function that was formerly undertaken by the Queensland Water Commission[1].

The provision of a safe and reliable drinking water supply is critical for the health and wellbeing of Queenslanders. A cost-effective bulk water supply is also essential for Queensland's strong economic development. A key principle for Seqwater is protecting public health, it must be the paramount objective for managing drinking water systems, which must not be compromised for any other objective.

Introduction

Thank you for this opportunity to provide submissions on Amendments to the Telecommunications Carrier Powers and Immunities Framework – Tranche One.

Please note that Seqwater has previously lodged submissions:

- with the Australian Government (through then the Department of Communication and the Arts) (**DOCA**) opposing the *Possible amendments to telecommunications carrier powers and immunities – consultation paper* dated June 2017 (*Possible amendments*);
- on changes to the Mobile Phone Base Station Deployment Industry Code (C564:2011) (**Existing Deployment Code**) and set out in Industry Code DR C564:2018 Mobile Phone Base Station Deployment (**Proposed Deployment Code**);
- with Parliamentary Committee for the inquiry into and report on the deployment, adoption and application of 5G in Australia. A copy of these submissions is annexed to these submissions as **Annexure A**[2];
- the Federal inquiry into Consultation on proposed temporary facilities and other amendments; and
- with the Australian Government (through Department of Infrastructure, Transport, Regional Development and Communications) on Improving the Telecommunications Power and Immunities Framework.

To the extent relevant, Seqwater repeats and relies on the above submissions for raising its concerns with the roll out of new technologies (such as 5G) and existing telecommunication equipment. This reasoning is based on what Seqwater views as a deficiency in the regulatory legislative framework surrounding telecommunication deployment in general and unacceptable risks to water quality, public health, asset protection, worker safety and Seqwater's ability (as a public utility (as that term is defined in the Telco Act)) to meet its legislative obligations and statutory functions. For this reason, Seqwater opposes amendments to the regulatory framework being done in piecemeal to facilitate the operations of the carrier powers and immunities framework and rollout of 5G infrastructure and other telecommunications facilities in circumstances where landowner interests and concerns have not been adequately addressed.

[1] Further information can be obtained in Seqwater's '*Water for Life*' document (version 2) located at http://www.seqwater.com.au/sites/default/files/PDF%20Documents/Publications/Water%20Security%20Program%20-%20Regulated%20Document%20-%20WEB%20version%20with%20clickable%20links.pdf.

[2] Seqwater along with the Queensland Water Directorate also appeared before the House of Representatives, Standing Committee on Communications and the Arts Federal Inquiry (House of Representatives) on Tuesday 19 November 2020.

We set out below our general concerns with the roll out of new technologies (including 5G) and provide response to the exposure drafts of amendments to the Telecommunication Code of Practice 2021 (**Code of Practice**) and Telecommunications (Low-impact Facilities) Determination 2018 (**LIFD**) set out in the current Consultation along with feedback on what steps can be undertaken to balance the carriers' need for efficient and economic deployment framework which protects the interests and concerns of landowners and occupiers. This response is set out in **Annexure A**.

General Concerns

Seqwater does have concerns regarding the roll out of new technologies (including 5G), especially how it may potentially impact critical water supply infrastructure, system operations, health and safety of workers, site security and risks to drinking water quality and public health. Australia's water systems are vulnerable to threats and disasters (both manmade and natural) including water shortages and droughts, earthquakes, storms with high winds and flooding and bushfires.

As a member of the Powers and Immunities Working Group (**PIRG**)[3] and its association with peak bodies such as the Queensland Water Directorate, NSW Water Directorate and Water Services Association of Australia (**WSAA**), Seqwater has outlined (in the abovementioned submissions) some of the issues impacting on its water supply reservoirs from telecommunication installations that related to telecommunication regulatory regime including the deployment of past and current technologies. The Queensland Water Directorate has reviewed and provides full support for this submission.

In this regard, Seqwater makes the following comments.

Any roll out of new technologies in Australia must be done in a regulated legislative framework and in a safe manner and without adverse impact to Seqwater's operations, its statutory functions and ability to operate critical infrastructure thus ensuring protection of landowner interests. It has been noted at the PIRG, that many water services providers are not resourced to deal with the technical implications of telecommunication installations – in particular the long-term impacts to the asset owner/landowner. In most cases, telecommunication installations do not support water regulation – public health does not appear to be a factor taken into consideration. Alternatives needs to be considered.

It is critical that any telecommunication equipment including the roll out of new technologies should not:

1. reduce the protection of drinking water supplies from:
    a. any risk of contamination or loss of continuation of drinking water supply to the community;
    b. firefighting capability such as in the event of bushfires and major building fires;
2. interfere with a water service provider's statutory functions and its ability to maintain and operate its assets – there should be a consideration of both existing and future requirements of the water service provider – like telecommunications, water service providers have a requirement of meeting community demand and expectation – in many instances, this requiring upgrades and new infrastructure to be built to ensure security and reliability of water supply to the community;
3. impact on critical infrastructure - because of the critical importance of clean drinking water to the community, it is vital that water service providers identify and manage security risks associated with this critical infrastructure. Failure or security breaches in these control systems can have

[3] Seqwater is also a member of Working Committee 90.

major consequences for the health of the public, the environment, and the businesses that rely on these services;

4. place unnecessary risks to worker and site safety;
5. compromise user pays principles by effectively passing costs relating to telecommunications installations on to landowners – which in this case ultimately means the community. Seqwater has absorbed costs associated with the new wave of infrastructure investment and removal of redundant infrastructure falong with those costs associated with legal (including court action), operational maintenance, engineering and EME assessments, safety consulting and governance, and accelerated degradation of assets. Seqwater views the compensation provisions provided under the Telco Act to be deficient[4].

It is also critical that considerations set out in Seqwater's previous submissions (in particular, refer to **Annexure B**) are addressed and recommendations implemented. Some of these are repeated below in response to certain amendments to the Code of Practice and LIFD.

Code of Practice amendments

The proposed amendments to the Code of Practice are considered below.

1. Clarify existing safety conditions

Existing safety conditions are deficient and do not address the concerns raised by Seqwater and the water industry. At law, Seqwater's health and safety obligations extends to all entrants to its sites, including carriers and their employees and contractors.

A. EME considerations

It is noted that issues related to potential health and safety of electromagnetic energy (**EME**) emitted by telecommunications installations have not been considered. It is unclear why EME emissions from telecommunication installations is being considered in isolation of other safety matters) for example, separate to worker and site safety. EME emissions from telecommunications installations is being forced onto the environment of a public utility landowner which would not normally be the case.

In many instances, the PIRG has observed that many mobile base stations with the Radio Frequency National Site Archives (**RFNSA**) are not compliant with the Australian Standard, Australian Radiation Protection and Nuclear Safety Agency (**ARPANSA**) Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields (RPS3) (**RPS3 Australian Standard**).

[4] Water service providers incur costs having carriers upon their land and/or infrastructure.
Seqwater submits that compensation provisions (for example under section 42 of Schedule 3 to the Telco Act) as currently drafted does not provide adequate remedy (including for business interruption). Seqwater submits that the provision be expanded to include commercial arrangements in lieu of compensation between the parties and entitlement to charge application fees (similar to other industries) to assess proposed carrier activity via consents process – this will alleviate a water service provider being put to unnecessary expense to quantify its compensation claim if a dispute involves for example, where multiple carriers exist on a site or facility base station, or if a carrier refuses to pay rent or acknowledge that the water service provider has suffered loss or damage.

The RPS3 Australian Standard is prepared on the basis of exposure for a six-minute internal, which is in line with the very short duration that carriers (their employees and contractors) are exposed in their duties. It does not contemplate the extended duration that water service workers would be exposed to the EME radiation. There is no acceptable limit/s on exposure to EME radiation. EME radiation is not visible. Workers would not know that they were exposed to EME radiation until it was too late and damage was caused.

Any person accessing sites of a water service provider (for example, water reservoirs) is meant to view all the Exclusion Zones (areas close to antennas) drawings identified in an EME Site Safety Report before accessing a site to obtain a complete understanding of the EME radiation sources at that site. Many water service providers do not have confidence in the EME Site Safety Reports being in many cases incomplete or inaccurate. Carriers can also change the operation of the telecommunication equipment to change the EME radiation, these guides are not accurate and vary. They are further qualified as they can only be relied on as current at the date of issue and some EME Site Safety Reports are limited/conditional due to unknow equipment/fixtures and do not provide guidance for landowners on all EME radiation emission zones.

Signage indicating the presence of EME radiation in relation to carrier equipment is often limited and inadequate. For example, there are no painted envelopes or Exclusion Zones marked out to delineate where EME radiation hazards may exist. It is difficult for workers of water service providers to operate and navigate through theoretical fields displayed in EME radiation drawings without site reference points (for example, access ladders and entry hatches), particularly in circumstances where they may need to be manoeuvring maintenance equipment such as diving equipment, remote operated vehicles and tripods and undertaking disinfection processes. In some cases, the entry hatch of reservoirs are located within Exclusion Zone area, which workers should not stand upon for any prolonged period.

Some of the telecommunications equipment deployed on public utility infrastructure (for example, on the tops of reservoir tower roofs) are omnidirectional, in that they emit EME radiation in all directions. Carriers are also able to modify the operation of EME radiation, and this can possibly be done remotely. A water service provider is totally reliant on the carriers to inform them of changes to the operation of the EME radiation, which may not occur in a timely manner. Various documents have been created which are supposed to map the EME radiation and provide water service providers with the information about the EME radiation operating at a site. This is further complicated by the presence of unknown equipment and reluctance by carriers to allow a shut-downs/electrical isolations.

Seqwater submits that EME emissions are:

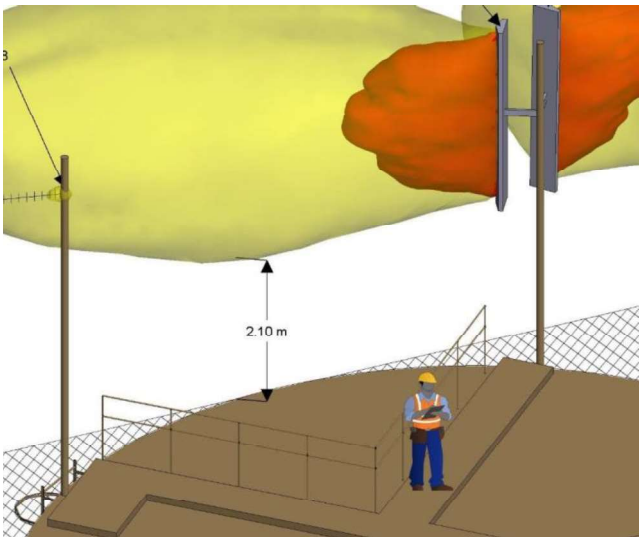
- an interrelated factor that needs to be fully considered and is seen as integral to the process of installation of telecommunication facilities on or within public utility infrastructure of a water service provider;
- other safety factors are subordinate to EME – for example, on a risk assessment, EME would be classified as a high risk along with falling from heights, drinking water contamination etc.
- impact on landowner's ability to perform electrical isolations[5] impacting on worker safety, operational and maintenance activities of a water service provider.

[5] A formal requirement should be made to the Code of Practice to allow landowners (for example, water service providers) to undertake shut-downs to perform maintenance of its own assets or during emergency events. Water service providers have previously experienced significant difficulties with obtaining carrier consent to perform electrically shut-downs (where carriers have tapped into the same water service providers power source). This can become a protracted and costly process for water service providers with delays in accessing and performing

In any event, Seqwater repeats and relies on its submissions regarding EME risks made in response to the deployment of 5G: (refer to page 4 of the submissions at **Annexure B**)[6].

These submissions included (which are repeated below) a requirement for carriers to accurately update the EME Guide for Site Safety (via actual site inspection as opposed to a desktop analysis to ensure accuracy) for the deployment and to include additional information for sites of water service providers such as:

a. EME Guide should specify:
   i. detailed EME exclusion zone clearances (suggested example is below);
   ii. location of cables, cable trays;
   iii. details as to how power is sourced;
   iv. which antennas are live/un-live;
   v. location of isolation switches;
   vi. details of whether equipment can be operated remotely.



Red Zone = Exclusion Zone. No access without confirmed transmitter power reduction or transmitter shutdown.

Yellow Zone = Exclusion Zone. Limited access to specially trained personnel (RF Workers).

White Zone = General access

Height of Aaron = 1.75m

maintenance or emergency work. This is further complicated with the presence of facilities where the owners are unknown. See submissions made before the House of Representatives on 19 November 2019.

[6] It is noted that an Environmental EME report when issued prior to carrier installation only provides information based on ground level around the base station, this does not provide an indication of the exclusion zones (upfront) on or around the elevated areas therefore the asset owner is unable to assess the operational risk until the Site EME guide is produced after installation. It is submitted that an asset owner should have powers to request that equipment be modified or removed if the EME affect the normal operations and safety of the land/asset owner operations or worker safety.

b. It should be mandatory for a carrier to provide a copy of the EME Guide for Site Safety to the water service provider within a certain timeframe (for example, within 10 business days of updating).

c. if so requested by a water service provider, notices issued by carriers should include:
   i. an indemnity and release in favour of the water service provider to limit the EME radiation exposure for a water service provider caused by the deployment;
   ii. an assurance that the carrier will at, its cost and expense:
      1. maintain the up-keep and good working order of equipment for its full lifecycle;
      2. updates to the EME Site Safety report with respect to Radio Frequency National Site Archives (**RFNSA**) sites (this should also include non-RFNSA sites); and

d. carrier personnel carrying out the deployment are trained in the requirement/s relevant to the activities and operations of water service provider (for example, water quality training and site access requirements).

B. <u>Protection of critical infrastructure</u>

It is noted that a number of carriers are using the powers and immunities to install facilities directly onto (or within) public utility infrastructure (for example, drinking water reservoirs). A public utility landowner does not have a legislative right under the telecommunication regime to specifically object to facilities being installed directly onto public utility infrastructure[7]. Legislative amendment is required to provide adequate protection of public utility infrastructure – this protection should also provide a public utility landowner the right of first refusal to install telecommunication[8]. In the absence of landowner consent from a water service provider, the roll-out of new technology should not be done outside this process. As currently drafted, the exposure draft to the Code of Practice does not afford water service providers with this protection.

This should also include, to the extent a landowner is a public utility, the installation on or affixed to public utility infrastructure. If not done so already, Seqwater recommends the Department adequately consult with Comcare with regards to the safety concerns raised in this and previous submissions with regards to the roll out of new technology. This will assist with the creation of a primary condition and specify requirements to comply with applicable state/territory legislation including WHS (such as safety in design), Building and Professional Engineering legislation amongst other safety requirements.

The current safety arrangements embedded within the telecommunication regulatory regime do not provide a landowner (in particular in the case of a public utility) with assurance for the safe and effective implementation of telecommunications. It is noted that the industry standards and codes do not specifically deal with the impacts (both safety and structural) upon public utility infrastructure. It is likely that any proposed industry code would take a long period to be negotiated and drafted and most likely be skewed in favour of carrier installation to the detriment of public utility infrastructure on the basis that

[7] It is noted from discussions with the Department, that drinking water reservoirs remain a 'facility' for the purposes of the telecommunication regime despite objections from the water industry.

[8] Like many other water service providers, Seqwater has experienced that section 192 of the *Water Supply Act* cannot operate concurrently with the *Telco Act* despite the provision of section 38 of Schedule 3 to the *Telco Act*. There is a disconnect between operating legislation and this view appears to be supported by other water utilities in Queensland (see previous submissions). In our view, an amendment is urgently required to section 37(f) of Schedule 3 to the *Telco Act* to overcome court determinations to exclude interference with public utility infrastructure from the ambit of its operation.

telecommunication installations are afforded higher protection (in the order of priority) over the supply of drinking water. As a water service provider, other safety concerns for Seqwater have included:

- installation of carrier batteries and communication racks within a restrictive site of a reservoir structure can lead to fire risks[9] and smoke and toxic fume hazards for workers (i.e. associated with carrier's battery/electrical installations which can overload the inside of a high-level drinking water reservoir that has been designed with one access route, meaning the main entry (escape route) can be compromised);
- fire can heat the surface of the concrete structure - this can then decrease the strength of the concrete.

Seqwater is of the view that additional regulatory mechanism (included into the Code of Practice) to provide adequate protection of public utility infrastructure is required. Previous submissions have been made to expand the jurisdiction of Australian Communications and Media Authority (**ACMA**)/TIO to deal with matters of safety[10]. This is still supported.

The addition of the above primary safety conditions to the Code of Practice would provide a public utility landowner with a level of assurance and specify the requirement to carriers to comply with applicable state/territory legislation including WHS, environmental, building and professional engineering legislation. Instead carriers are immune from a range of State and Territory laws when carrying out activates, such as laws relating to land use, planning, design, construction, siting, tenancy, environmental assessments and protection[11] - this is unacceptable and poses many safety concerns.

C. Removal of redundant equipment

The draft Exposure does not deal with redundant equipment. Seqwater views the requirement under the *Mobile Base Station Deployment Code C564:2018* (the Deployment Code) for carriers to make sure that equipment no longer in service, does not transmit, or is removed, is deficient and unsafe for the reasons set out below[12].

The Communications Alliance has identified and reported to the PIRG that 10% of RFNSA sites house unknown equipment (equipment where owners cannot be identified). Unknown equipment has become very problematic for the water industry and impacts on a water service providers ability to carry out its statutory functions and puts public health at risk[13]. For this reason, it is very important that:

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[9] A carrier battery hut on a site operated by Seqwater has been impacted by smoke.

[10] Seqwater (along with water industry) previously submitted that sufficient jurisdictional powers be provided to ACMA and/or the Telecommunications Industry Ombudsman (TIO) to deal with water service provider's concerns including a system of penalties and fines be introduced to ensure carrier compliance. We recommend that as part of the expanded powers of ACMA and/or the TIO that it has jurisdiction to order against carriers:

- the removal of any installed low-impact facility at the carrier's sole cost and expense (for example, if public utility infrastructure is impacted by the installation);
- reinstate the land and the infrastructure (if infrastructure is impacted by the installation) at the carrier's sole cost and expense;
- where infrastructure of a water service provider has been impacted, reinstatement is to include a full engineering assessment and engineering certification of the infrastructure impacted.
- the basis of the above is to prevent the unauthorised deployment proceeding in the first instance and the carrier giving consideration to co-locating to freestanding telecommunication poles/towers.

[11] Refer to Explanatory Statement to the Exposure Draft to Telecommunications Code of Practice 2021 at page 1.

[12] Leaving equipment in situ impacts on site and worker safety and potential for EME impacts if equipment is turned on without the landowner knowing etc. It is also difficult for a water service provider to perform electrical isolations.

[13] Ibid.

- all deployed equipment be sufficiently labelled with carrier's name and emergency contract details: [see Seqwater's previous submissions at page 5, point 9 of Annexure A - (for example, something similar to that used by the Australian Defence, Defence Labelling Standard Equipment and Equipment Systems could be used as a guide – please see **Annexure G**). This will assist with ease of identification of owners during an emergency event in a timely and safe manner];
- the Code of Practice be amended to provide a suitable working process for landowners to remove redundant and unknown equipment (including within sufficient timeframes – say within 25 business days) so that water service providers are not in breach of section 474.6 of the *Federal Criminal Code (Cth) 1995* (which makes it an offence to interfere with a facility without the consent of the owner: [refer to Seqwater's previous submission at pages 5 and 6, point 12 of Annexure A].

In Seqwater's experience, non-regulatory methods have had limited effect and request for new requirements to be included into the Code of Practice, namely:

1. suitable and workable process for water services providers to be able to have removal of redundant and unknown equipment (including within sufficient timeframes) so that water service providers are not in breach of section 474.6 of the *Federal Criminal Code (Cth) 1995*, where the water service provider has made genuine efforts to ascertain or locate the owner of the equipment including notification to ACMA[14]. If a carrier cannot be identified (i.e. a landowner consent cannot be obtained), a water service provider has two options, namely:
    a. applies to the Federal Court of Australia to seek orders to obtain the approval of the court to remove the equipment as ACMA and TIO does not have jurisdiction. It is noted that this provision has not been judicially tested including where a landowner interferes in order to respond to an emergency (this also implies a consideration of what constitutes an emergency – which can take on a different meaning for landowner v. carrier). This prevents the water service provider from taking direct and urgent action to rectify issues created by illegally installed carrier equipment or to respond in an event of emergency (for example, loss of continuity of water supply, natural disaster event or contamination of water supply as damaged vermin proofing can allow vermin into a drinking water reservoir, or illegal access by someone breaking into the hatch). This can also cause worker safety and site security concerns. This scenario can also lead a water service provider to allow its asset to run to failure – due to its loss of control of infrastructure; and
    b. allow the asset to run to failure i.e. permit an emergency scenario. This approach places a significant cost on the replacement of water utilities assets. These costs are ultimately

[14] It is noted that unknown equipment is outside the terms of reference of the Working Committee 90. Landowners need to be able to deal with unknown equipment. Seqwater has previously made submissions for the creation of new online database for hosting all carrier deployment - the current register for the location of carrier equipment held by ACMA is incomplete and not sufficient for water service provider purposes to rely upon. In addition, the current information held by RFNSA can be limited, incomplete, inaccurate and out of date. For the purposes of worker safety, this information provided by the RFNSA cannot be relied upon by a water service provider. The lack of information can impact and interfere with the operations of a water service provider. It is critical that adequate records are maintained by ACMA as the telecommunication regulator. These records should also include sufficient details of the installation and evidence of landowner consent. We also recommend that ACMA undertake regular audits of installation and maintenance of deployment equipment in the field to ensure carrier compliance and to maintain public confidence.

absorbed by the water service provider and passed onto its consumers – this is not a cost saving for the public or end-users. It also places unacceptable risk on the community in relation to the water service provider's ability to supply safe drinking water.

2. Introduce a new engineering requirement

Seqwater would support a change to the Code of Practice for engineering requirements. However, the proposed provision as currently drafted in 1A.7 (Engineering Certificate – Installations) is limited that it only allows for post certification of "certifiable facilities". Seqwater submits that a carrier should be required to provide (as in the case of other industries) pre and post engineering certifications. Full engineering assessment is needed to consider impact to infrastructure, loads (wind, live and dead loads), materials being used, worker access and worker safety consideration. It is very unlikely that a post certification could be achieved by a carrier in circumstances where no pre-certification had been obtained in the first instance. This would mean that carriers could not achieve compliance with this proposed provision in the draft Exposure.

Engineering certification of the designs prior to construction, and of the construction, is also required by Seqwater to demonstrate compliance with *Professional Engineers Act (Qld) 2002* (which operates in Queensland). The Code of Practice should require carriers to provide the design certification with the LAAN (otherwise it is not a properly made LAAN) and within 20 business days of the activity being installed/completed (post certification). Allowing carrier to provide only a post certificate 30 days after they receive it from the supervising engineer will not be an effective mechanism as it gives a carrier an out to say they haven't received it, and therefore they will have no interest in chasing the supervising engineer to get the certification for forwarding to the landowner and in many cases, the public utility is unlikely to receive the as-built construction certification.

The proposed term of "certifiable facilities" – is limited as it does not provide for underground facilities owned or operated by a water service provider. The reasoning provided in the Explanatory Statement is ill supported and fails to take into account safety in design considerations as would normally be required as part of good engineering practice (as that term is intended to be defined by water service providers, refer to section 1.4 in **Annexure A**) and safety laws. For example, Seqwater has significant underground infrastructure and any proposal to locate installation in proximity to this infrastructure must be suitable assessed by qualified and registered engineers - structures can fail underground because the zone of influence has been impacted. The ability of Seqwater to safely operate and maintain its infrastructure can also be impacted.

The requirement for "suitably qualified engineers" to make assessment should be amended to read "suitably qualified and registered engineers". This would provide Seqwater with a level of assurance that engineering assessments comply with the mandatory requirements under the *Professional Engineers Act (Qld) 2002*.

Regulatory burden to carriers should not be seen as a means to dismiss the engineering assessment and certification requirements of public utility landowners operating critical infrastructure. To do so, places the critical infrastructure at risk impacting on public health and worker safety. This also impacts on a public utility landowner's operations and statutory functions.

Seqwater has previously provided its support for a condition be included in the Code of Practice that the ACMA must prescribe the form of a notice[15] to include the following:

1. a third-party consent process be adopted (as is common for most industry groups) to ensure any proposed roll-out of new technology (including 5G) on a water service provider's land or infrastructure is done in accordance with a water service provider's process for accessing and installing third party infrastructure. When infrastructure is likely to be impacted, this would ordinarily include:
    a. engineering assessments (pre and post installation) carried out by a registered professional engineer in the relevant discipline. We have provided some examples used by Queensland Government, Department of Housing and Public Works and Seqwater, please see **Annexure C**, **D**, **E** and **F**. Technical drawings/plans provided to public utility landowners need to be accompanied by/include engineering certification and/or building certification to demonstrate compliance with State/Territory laws;
    b. engineering specifications for proposed installation (including for a State's engineering registration) of the certifying engineer or manufacturer's instructions for each installation;
    c. engineering certification for the structural impact of each installation including;
        i. a State's registration of the certifying engineer;
        ii. a statement that the:
            1. water service provider's infrastructure is not structurally impacted by the deployment;
            2. the deployment does not impede a water service provider's use of its infrastructure for its operational and business purpose and to meet its statutory functions;
            3. the deployment does not interfere with a water service provider's telemetry equipment (an operational requirement for a water service provider);
            4. mains power supply to the deployed equipment is independent of a water service provider's power supply (similar to the requirements of Site Sharing Agreement/Arrangements of Telstra Corporation Limited);
    d. provision of a risk assessment and risk mitigation strategies undertaken by a carrier pertaining to the proposed installation (and ongoing maintenance) onto public utility infrastructure. This should include "Safety in Design" – a review / risk assessment (similar to requirements under section 22 of the *Work Health and Safety Act 2011 (Qld)* addressing risks to persons during construction, commissioning, operations and decommissioning and how they have been mitigated);
    e. provision of an end of life/decommissioning strategy for each telecommunication equipment including buried infrastructure[16] – this would extend to not only 5G but previous technology (for example, 3G and 4G etc.);

[15] Refer to previous submissions in response to Improving the Telecommunications Power and Immunities Framework.
[16] Buried infrastructure from carrier installations can impact on public utility landowners – for example, where a water service provider is required to access buried main trunk water main to carry out maintenance or repairs, or

f. provision of a commissioning report or equivalent sign off for each telecommunication equipment installation;
g. carrier being required to lay appropriate underground identification tape over the underground services halfway between the service and the surface in the trench to the satisfaction and requirements of landowner/occupier. Utility marking posts should also be used in the fence line;
h. all deployed new technologies (including 5G equipment) is sufficiently labelled (see comment above under removal of redundant equipment).

2. if so requested by a water service provider, provision of evidence of insurance – in many instances, a water service provider's policy of insurance is unlikely to respond to an incident caused by a carrier or by a carrier's equipment. In most cases, it is standard practice that prior to allowing any contractor onto the land of a public utility landowner that they produce evidence of insurance with the water service provider noted[17]. Therefore, any claims should they occur due to the carrier's work/deployment can be directed to them. It is unreasonable for these costs to be borne by a water service provider.

In the absence of landowner consent from a water service provider, the roll out of new technologies (including 5G) should not be done outside of this process.

3. Introduce new requirement for carriers to withdraw notices for cancelled activities

Seqwater supports the intent of formal requirements for a carrier to withdraw a notice contained in sections 2.25A, 4.26A and 6.25A. If a carrier fails to issue a formal withdrawal, can the landowner deem withdrawal? Clarification is needed in the Exposure Draft.

In addition to the above, please also consider the following amendments to the Exposure Draft:

- that a carrier cannot issue multiple LAANS for the same activity where a public utility landowner[18] has previously delivered an objection to a previous LAAN delivered. Any subsequent LAAN should be deemed invalid until a determination is made by either ACMA/TIO (as the case may be).
- where a carrier issues a LAAN for activity which is covered under an existing agreement with a public utility, then the LAAN is to be deemed invalid. This is to cover the situation where a carrier or its subcontractor (who may or may not be a licensed carrier) issues a LAAN for which an agreement governs the activity specified in the LAAN.
- where a carrier has not commenced the activity within a deemed number of business days of the planned start date (say 20 business days), the LAAN is deemed to have been withdrawn.

Compensation should be available to the landowners – in the case of public utilities, loss of business interruption and other associated fees (for example, if the public utility engaged a third-party consultant

carry out upgrades. Redundant buried infrastructure from carrier installations will cause havoc of a water service provider. Also, telecommunications facilities (both above and underground installed within easement and corridor for specific public purposes are acquired to cater for the current and future needs of the public utilities, statutory authorities and local/state governments. It is unreasonable for the owners/occupiers of these easement and corridors to be burdened with the cost of relocating telecommunication installations/encroachments into these areas.

[17] A contractor would also be required to maintain insurance throughout the relevant period.

[18] There have been instances where this is done by some carriers so that a landowner can miss the timeframe for response despite having delivered its objection to previous LAAN/s for the same activity.

to make engineering assessments etc.) the landowner should be able to recoup its reasonable costs associated with a cancelled activity. Please consider.

4. Introduce a new power for carriers to refer objections to the TOI, after they have made reasonable efforts to resolve the matter in good faith

Seqwater supports the Code of Practice being amended to allow carriers to refer objections directly to the TIO without waiting for a request from the landowner to refer the objection.

Seqwater submits that a new requirement to be introduced into the Code of Practice which requires a carrier to lodge all disputed objections to the TIO at first instance. This is to prevent carriers from commencing legal proceedings (for example, by lodging applications directly to the Federal Court of Australia or other court of competent jurisdiction for injunctive relief) which can incur significant costs for the public utility landowner prior to a determination being made by the TIO. The commencement of legal proceedings can be problematic for public utilities who are not resourced for or have budget to deal with these types of disputes[19]. All landowners would benefit from this new provision.

5. Include a timeframe in which carriers refer landowner-requested objections to the TIO

Seqwater would support for a deadline on carriers to lodge an objection with the TIO say within 20 business days rather than "as soon as practical" as currently drafted. This would give landowners certainty as to whether the carrier intends to proceed with its activity.

Consideration should be given to allow landowners to directly access the TIO to lodge disputes (if so required and expanded powers requested above are adopted) in circumstances that they cannot be dealt with by ACMA. Landowners need a suitable platform to deal with disputes and in a cost effective and timely manner.

Amendments to the LIFD

Seqwater does not support for antenna protrusions to be extended to a height of 5 metres where equipment has been deployed onto public utility infrastructure for a number of reasons. It would be concerning if this was adopted because:

- many existing carrier installations on or within public utility infrastructure (for example, drinking water reservoirs) are unlikely to meet formal engineering assessment and certification (for example, under the RPEQ system which operates in Queensland – please refer to comments above under point 2 above);
- drinking water reservoirs constructed prior to the establishment of the Telecommunications Act are not designed[20] to support additional load (live and wind) from carrier installation and the weight of people working on them[21] – this becomes more problematic where there are a number of carriers and overcrowding exists on roof tops. If each carrier was allowed to extend their height of each piece of equipment - this would place further loads on a structure which may

[19] The area of 5G deployment and telecommunication law is complex and can have long term implications for landowners.
[20] Not anticipated at the time of design of the public utility infrastructure (drinking water reservoirs).
[21] The factors of safety (AS1170) may not accommodate the extra loads from carrier installation.

already be overloaded or does not provide sufficient operational requirements for a water service provider[22] – this can compromise the structural integrity of the structure;

- places drinking water supply at increasing risk of contamination and has the potential to impact on public health (for example, birds roosting on antennas and defecating on reservoir roofs can place the drinking water at risk to the community);
- equipment that needs to be maintained and regulated and increases the risk for potential storm damage and lightning strikes (if appropriate lightening protection measures are not included in the design and installation of carrier equipment) and site overhead hazards;
- asset and site maintenance cost would be further increased and added to the burden of the asset owners due to the need to implement higher and more complicated access to sites where ongoing operational and urgent maintenance is required;
- visual impact. Seqwater sites are predominately located in high growth regions with dense population;
- access to critical infrastructure being blocked in particular by antenna protrusions on a single structure, for example to water supply reservoirs. This undermines Seqwater's ability to access and manage our water supply structures (including carrying out required operations and maintenance). It is also a safety risk for Seqwater personnel and other users of Seqwater sites including carrier personnel and other personnel;
- many of Seqwater's assets were constructed before 1960s and are approaching their end of infrastructure life;
- workmanship issues from the installation by carriers and lack of maintenance/upkeep;
- proposed future upgrades/repairs of Seqwater's water infrastructure may be impacted by the antenna protrusions.

Seqwater does not support this proposal to the extent that a drinking water reservoir is considered a "facility" for the purposes of the Telco Act for the reasons outlined in these and in previous submissions. The use of land/infrastructure belonging public utility should be excluded from item 12 in the Schedule to the LIFD. A landowner should also have the right of first refusal. For reasons identified above, the safety conditions qualification referred to are unlikely to provide sufficient safeguards for a public utility landowner operating critical infrastructure.

Unless agreement has been given by a public utility, a carrier should deploy their own towers (including their own electrical supply) independent of public utility infrastructure or co-locate onto existing telecommunication towers.

A public utility landowner would be disadvantaged (financial/non-financial) by:

- Costs attributed to further engineering and EME assessments;
- Costs attributed to business interruption;
- Delays in attempting to perform electrical isolations or inspections/repairs to water reservoirs;
- Increased compliance costs, for example, ensuring safety requirements are met due to potential of exposure to radiation hazards.
- Increased operational maintenance requirements due to increased quantity of infrastructure and bird roosting and asset impact areas.

[22] For operational, maintenance, public health and safety reasons, a water service provider requires sufficient footprint on its reservoir roofs to inspect and maintaining drinking water supply, assess the structure and provide sufficient platform for workers to operate from a WHS perspective.

It is also noted that the public utility landowner would have long terms impacts associated with tower extensions.

Seqwater is concerned that there is likely to be impact to its statutory functions and its ability to operate critical infrastructure. This is most likely to increase costs for a public utility – these costs are not budgeted for and likely to be passed onto consumers. Scheduling of maintenance of structures would be complicated by needing to arrange access with telecommunications carriers, which may delay critical repairs or reduce the ability of Seqwater to carry out its functions as a public utility.

If it is the intention to continue to have drinking water reservoirs classified as facilities[23], then Seqwater does not support this proposal to the extent that a public utility infrastructure (for example, a drinking water reservoir) is to be used to deploy on or within infrastructure for the reasons outlined above in these submissions including EME considerations.

Costs should not be the only consideration for making decisions for the roll out of new technologies (including 5G). Seqwater is of the view that this type of deployment should remain within current planning scheme processes and public consultation and key stakeholder engagement has occurred.

Seqwater previously made submissions for co-location sites, deployment is made directly onto telecommunication monopoles/towers instead of public utility infrastructure – this would provide a water service provider with a level of comfort (for example, ensure water quality and workers safety risks are maintained and minimised).

Seqwater does not support the updating of co-location limits in residential areas from 25% to 50% for installation on public utility infrastructure[24]. This will cause overcrowding and noise issues, Seqwater has to comply with noise requirements in residential areas. However, Seqwater would support the increase if that is applied to existing carrier telecommunication towers subject to safety, EME and engineering assessments and landowner requirements/considerations etc.

It would be useful, when constructing new telecommunication towers/poles, for a carrier to specify the additional capacity allocated to cater for potential co-locations[25].

If an existing Telecommunication Tower is within close proximity to proposed low impact on a utility asset the Carrier must demonstrate that colocation onto the Telecommunication Tower is not physically or technically possible. This report should be produced by an independent third party.

Summary

In summary, Seqwater supports the installation of telecommunications infrastructure in the community where that infrastructure does not compromise our ability to fulfil our legislative obligations regarding: health and safety of employees, asset management, water supply operations, site security, critical infrastructure resilience and business continuity, public health and water quality.

Seqwater seeks that the Department (and decision makers including the Minister, Hon. Paul Fletcher) ensure:

- drinking water supplies are protected from any risk of:

[23] Clarity is needed noting that the Consultation Paper did not specially exclude water reservoir infrastructure.
[24] Seqwater understands that the colocation limits operate in conjunction with noise limits. This does not appear to be mentioned in the Consultation Paper.
[25] It would also be useful for this information to be set out in the EME Safety Guide.

  - contamination and from loss of continuation of drinking water supply;
  - deployment for firefighting purposes.
- Seqwater workers are safe from harm caused by carrier installations at all times;
- amendments are made to section 474.6 of the *Criminal Code (Cth) Act 1995* to facilitate the removal of telecommunication equipment where the identity of ownership cannot be identified;
- water utilities can meet their legislative obligations and statutory functions under relevant State legislation.

This view is supported by the water industry, in particular WSAA and Queensland Water Directorate.

Please contact [redacted] if you require any further information on [redacted].

Yours sincerely,

[redacted]

Annexure A – Refer to Seqwater's Table of Amendments to Code of Practice and LIFD

Section	Comments
1.4 Repeal Background to code of practice	• Needs to provide for 'removal/demolition of a facility' – insert new Division 5 of Part 1. Safety in design considers removal /demolition – the whole of the system. • The term "good engineering practice" needs definition to accommodate public utility considerations and critical infrastructure – the absence of such does not meet this concept. Seqwater generally defines it to mean: "engineering, technical and safety activities or standards that: o ensures the life and purpose of the Seqwater's Infrastructure is not diminished; o the drinking quality of the water contained inside the Seqwater's Infrastructure is not diminished; o there are no increases or hindrances in operations or maintenance activities for Seqwater; and o any design is required to be certified by an engineer registered with the Board of Professional Engineers Queensland (i.e. RPEQ) in the relevant area of discipline; o complies with the relevant safety in design considerations in particular as related to National Construction Code and Work, Health and Safety legislation. • In exercising a power, a carrier should also comply with safety requirements and National Construction Code.

1.6 Notification procedures (1)The time for when a notice sent by post to an address in Australia is deemed to be given to, and received by, the addressee is to be determined in accordance with the table at Regulation 6 of the *Australian Postal Corporation (Performance Standards) Regulations 1998* as in force from time to time. Note 1 For the ways in which notice may be given, see section 28A of the *Acts Interpretation Act 1901*. Note 2 For the way in which a written notice must be posted in order to be properly given, see section 29 of the *Acts Interpretation Act 1901*. Note 3 For the circumstances in which a notice may be given by means of electronic communication, see the *Electronic Transactions Act 1999*. (2) A notice left at the residence of the person to whom it is addressed is taken to have been given on the second	• Notification procedures in section 1.6 do not provide for adequate service provisions for public utilities – many water service providers operate unmanned sites and have extensive networks – such service is impracticable and unconscionable. • Subsection (2) is opposed - notice should not be "left" at the residence of the person. This is problematic for public utilities managing unmanned sites or where offices have been closed (for example operational and maintenance issues or because of a pandemic) – such notice if left (or placed on gates) may not been picked up by the owner/occupier within the objection period. Water service providers operate critical infrastructure and proper considerations of proposed carrier works needs to be reviewed to ensure that their operations and critical infrastructure are not impacted. • It is recommended that notices be dealt with in accordance with comments made at 1.6, 2.26 and 2.27 below. Many government departments and agencies only receive notices by registered mail or by hand addressed to the authorised officer at the registered business address. Electronic means of delivery is not acceptable. • Notification procedures do not provide for adequate service provisions for public utilities - water service providers have unmanned sites and have extensive networks – such service is impracticable and unconscionable. • Subsection (2) – in the case of a public utility, it is recommended that the similar wording as is found in *section 28A(1)(b) of the Acts Interpretation Act (Cth) 1901* for service of documents on body corporate be used – i.e. notice should be served to, the head office or a registered office of a public utility.

business day after it was left at the residence. (3) A notice mentioned in this Code may be combined with another notice mentioned in this Code. (4) In this Code, unless the contrary intention appears, where a proposed action forms part of the activity of an unincorporated joint venture comprising two or more carriers, the reference to 'carrier' is taken to be to the carrier that is legally authorised under the joint venture arrangement to perform the proposed activity on behalf of the other carriers. (5) A notice given by a carrier in accordance with this Code in respect of proposed action forming part of the activity of an unincorporated joint venture must include the legal name and registered place of business of each entity forming part of the joint venture.	

1A.1 Purpose of Chapter 1A (1) Under the Act, if a carrier engages, or proposes to engage, in a prescribed activity or a temporary defence facility activity, the carrier must comply with the conditions: (a) specified in Part 1 of Schedule 3 to the Act; and (b) specified in the regulations; and (c) set out in this Code. (2) Part 2 describes the primary safety conditions carriers must comply with when engaging, or proposing to engage, in a prescribed activity. (3) Part 3 describes the primary operational conditions carriers must comply with when engaging, or proposing to engage, in a prescribed activity.	• Section 1A.1 – the conditions contained therein have not been varied to address concerns raised by the water industry. These concerns need to be satisfactorily addressed to ensure critical infrastructure is protected. • The primary safety conditions and primary operational conditions which a carrier must comply with when engaging, or proposing to engage in, in a prescribed activity are deficient. It is unacceptable, and in conflict with safety and operational requirements of water service providers that carriers have immunity from a arrange of state and territory laws when carrying out those activities, such laws relating to land use, planning, design, construction, siting, tenancy, environmental assessments and protection. • Recommend the inclusion of a requirement for the carrier to comply with the National Construction Code. This could either to come under 'primary operational conditions carrier to comply with under Part 3 or set up a new Part 4.

Chapter 1A Primary Carrier Condition Simplified outline of Chapter 1A	• Recommend "prescribed activity" include "a removal or demolition activity" – the definition needs to be able to deal with redundant equipment. This activity needs to be planned for safety and operational reasons of a water service provider.
1A.1 Purpose of Chapter 1A	• Recommend clarity on what the regulations are and how they protect the interest of water service provider; • Recommend the inclusion of a requirement for carriers to comply to include "requirements set out in the National Construction Code".
1A.2 Meaning of prescribed activity	• Prescribed activity should also include "a removal or demolition activity".
1A.3 Management of activities	• Definition of "good engineering practice" needs proper definition to protect critical infrastructure (existing and future requirements) of public utilities. • Add further requirement "to comply with the requirements of the National Construction Code". • Public utilities want the right of first refusal to ensure the protection of critical infrastructure and water service providers can carry out their operations and statutory functions unfettered.

1A.4 Best practice (1) In engaging in a prescribed activity, a carrier must ensure that the design, planning and installation of facilities (the ***carrier's facilities***) is in accordance with best practice. (2) For subsection (1), ***best practice*** is conduct of the carrier complying with: (a) an industry code, registered by the ACMA under Part 6 of the Act, applying to the activity; or (b) a standard, made by the ACMA under Part 6 of the Act, applying to the activity. (3) However, if there is no code or standard in force for the activity, best practice is conduct regarded by people constructing facilities substantially similar to the carrier's facilities as using the best available design, planning and location practices to minimise the potential degradation of the	• "best practice" – definition is not acceptable to public utilities as it fails to consider primary and critical infrastructure of the landowner public utility) being impacted. • (3) "potential degradation of the environment and the visual amenity associated with the facilities" - this should not be the only consideration. This is inconsistent to "good engineering practice".

	environment and the visual amenity associated with the facilities.	

1A.5 Compliance with industry standards	• The requirements for carriers to comply with "industry standards" is deficient. • In the of public utility infrastructure being impacted, recommend a new subsection be provided for requiring carriers to comply with the same industry standards of water service providers – public utilities have their own standards and procedures which integrate with relevant Australian Standards. This is needed to ensure the proper protection of water systems and critical infrastructure. • Subsection (c) – it only mentions "safety of the public" – this provision needs to be amended to also include infrastructure of the public utility being impacted and requirements of a water service provider which is supposed to directly relate to safety of the public.
1A.6 Compliance with standards and codes	• We repeat and reply on comments made at 1A.5 above. • There are no standards and codes under Part 6 of the Act for a carrier to comply with to protect the requirements of water service providers operating critical infrastructure.

1A.7 Engineering Certificate – Installations	• This proposed provision only allows for post certification on certifiable facilities which is deficient. Pre-engineering certification is required where infrastructure of a water service provider is being used or impacted. Full engineering assessment is needed to consider loads (wind, live and dead loads), materials being used, worker access and worker safety consideration. It is very unlikely that a post certification could be achieved by a carrier in circumstances where no pre-certification had been obtained in the first instance. This would mean that carriers could not achieve compliance with this proposed provision. • Subsection (2) – "suitably qualified engineer" – in accordance with legislative requirements – we request engineers be registered as well. We suggest the words "and registered" are added before the word "engineer". • Subsection (4) – needs to contain information on potential loads and impact to critical infrastructure. Public utility landowners have their own requirements for loads and safe working areas. • "Certifiable facilities" – the definition is limited as it does not provide for underground facilities. The reasoning provided in the Explanatory Statement is ill supported and fails to satisfy safety in design considerations as would normally be required as part of good engineering practice (as that term is intended to be defined by water service providers – refer to section 1.4 above) and safety laws. For example, Seqwater has significant underground infrastructure and any proposal to locate installation in proximity to this infrastructure must be suitable assessed by qualified and registered engineers - structures can fail underground because the zone of influence has been impacted. • Engineering certification of the designs prior to construction, and of the construction, is also required by Seqwater to demonstrate compliance with *Professional Engineers Act (Qld) 2002* (which operates in Queensland). The Code of Practice should require carriers to provide the design certification with the LAAN (otherwise it is not a properly made LAAN) and within 20 business days of the activity being installed/completed. Allowing carrier to provide it 30 days after they receive from the supervising engineer will not be an effective mechanism as it gives a carrier an out to say they haven't received it, and therefore they will have no interest in chasing the supervising engineer to get the certification for forwarding to the landowner and in many cases, the public utility is unlikely to receive the as-built construction certification. • Suggest the department engage (if not so already) suitable qualified and registered engineers to review landowner concerns so that they have a better understanding and appreciation of concerns being raised by water service providers.

1A.8 Carrier to do as little damage as practicable	• For public utility landowners – carriers be made to meet access and operational requirements of a public utility landowners.
1A.9 Carrier to restore land	• Subsection (1) – is limited to only "land". Structures impacted by carrier activity should also be restored. Recommend the words "or infrastructure" is added after the word "land". • In the event that ownership of carrier infrastructure changes over time, this obligation is to be transferrable to the new carrier/assigned carrier. For example, if they drill into a reservoir –the concrete wall needs to be rehabilitated and waterproofed to protect the structure from corrosion – this would ordinarily be a requirement under the National Construction Code.
1A.11 Agreements with public utilities	• Right of first refusal imbedded into the new amendments to ensure the protection of critical infrastructure and so that water service providers can carry out their operations and statutory functions unfettered.
1A.12 Notice to road authorities, utilities	• The provision "altering the position of water…or pipe" – how can this be done this to critical infrastructure or provision of essential water services – this needs to be deleted/removed. Water service providers should not be paying for this. Relocation of a pipe or position of water could take months (12months) and in some instance years – design and construction plans to relocate trunk water are at multi-million dollar expense. In any relocation, water service providers would be required to liaise with all relevant stakeholders, obtain relevant approvals, carry out pre and post engineering certification, order materials and other supplies, install pipes amongst other things. We also need the ability to undertake isolations – this can't be done in periods of high consumer demands and subject to other methods of water supply being available. None of this seems to have been considered. • Concerns with section 54 to Schedule 3 – "if the land is not occupied--attaching, if practicable, a copy of the notice to a conspicuous part of the land. – this is unconscionable – written notice needs to be sent to the principal office of the owner. We repeat and reply on comments made at 1.6 above.
1A.13 Records for certain facilities	• Subsection (2) – carrier should be keeping records for all types of facilities when impacting on land or infrastructure of a water service provider. • Should be "levels" not "depth". Levels provides clarity on vertical alignments on what you are working with.

Division 1 Introduction 2.20 Purpose of Part 5	• Subsection (1) notice needs to be served directly to public utilities. • Subsection (2) – clause 54 of Schedule 3 – notice is deficient - (d) if the land is not occupied—"attaching, if practicable, a copy of the notice to a conspicuous part of the land." – public utility landowners/occupiers operate critical infrastructure -leaving notices at unmanned sites is not acceptable. Landowners needs to be able to consider LAANs and impact to their operations. This provision has the potential to be unconscionable and lead to misuse impacting on critical infrastructure. • We repeat and reply on comments at 1.6 above.
2.21 Applications of Divisions 3, 4 and 5 of Part 5	• Water service providers have their own operational requirements when responding to a "disaster declaration" – concerns that a carrier's land entry activity will conflict with public utility's operations and statutory functions. It should be noted that many water service providers across Australia provide flood mitigation services and are impacted by other disaster events such as bushfires and drought. • Subsection (2) - "safety of life and property is endangered" - this is limited as it does not provide for the protection of essential water service or critical infrastructure operated by public utilities. • Subsection (3) – clarity is need in the Exposure Draft as to whether this is then deemed to be a non-Schedule 3 type installation.
2.22 Notice to owner and occupier of land	• Subsection (3)- compensation provisions under clause 42 are not an adequate remedy for public utility service providers. Water service providers incur costs having carriers upon their land and/or infrastructure. These costs are not budgeted for and consequently absorbed by the business and passed onto consumers which is unreasonable. It does not provide for business interruption. Seqwater submits that the provision be expanded to include commercial arrangements in lieu of compensation between the parties and entitlement to change application fees (similar to other industries) to assess proposed carrier activity via consents process – this will alleviate a water service provider being put to unnecessary expense to quantify its compensation claim if a dispute involves for example, where multiple carriers exist on a site or facility base station, or if a carrier refuses to pay rent or acknowledge that the water service provider has suffered a financial loss or damage. • Subsection (4) – "10 business days" – it was understood that as an outcome of the recent consultation "20 business days".
2.23 Serving notices if owner unknown	• "the carrier may treat the land as unoccupied" – the provision could lead to misuse especially if notices are just left a gate or the owner is away etc.

Division 3 Additional notification requirements 2.24 Notices to owner and occupier of land: additional requirements	• Clarity needed as to how the template (previously developed at the PIRG) is integrated – the provision does not refer to it. • Subsection (2) – is the document issued by the TIO the same document in relation to a referred objection? Clarification in the Exposure Draft is needed.
2.25A Withdrawal of notices	• Seqwater supports the intent of this provision. • Clarify whether compensation is available to the landowner – in the case of public utilities, loss business interruption and other associated fees (for example, if the public utility engages a third-party consultant to make engineering assessments etc.) • If carrier fails to issue withdrawal – can the landowner deem withdrawal? Clarification is needed.

2.26 Agreement on alternative notification arrangements **2.27 Additional arrangements for serving notices**	• For public utilities – the "alternative notification arrangements" should not be at the discretion of the carrier as currently drafted. Water service providers have sought on a number occasions through this and previous consultation process for the case of a notice being delivered to a public utility landowner, the notice must be delivered by a carrier to the registered/head office and/or to the appropriate delegate of the public utility or their general enquires email address. At no time, should a notice be left on an unmanned site etc[1]. Public utilities operate critical infrastructure and any intended activity needs to be fully considered so that critical infrastructure is not compromised or public health put at risk. Carriers are encouraged to contact the water service provider in advance to discuss their intentions before issuing a LAAN. They are also encouraged to contact the water utility to confirm whether the landowner has received the LAAN. • Allowing a carrier to "attach [a notice] to a conspicuous part of the land": ○ prejudices the owner or occupier as it may lose the right or opportunity to object to the activity; ○ has the potential to cause a safety or catastrophic event (for example, a carrier may be unaware of safety concerns, structural deficiencies in existing public utility facilities, potential for drinking water reservoirs to explode – see example from the Cooma concrete water tank failure in NSW).

[1] During Covid19, water service providers across the Country have limited workers accessing sites/sites shut down etc. and notices may not be received.

	 • Wording in provision (unilateral) inconsistent to provision in 4.16 which allows “the carrier and Director” to agree.

2.29 Reasons for objection	• Subsection (b) only provides for "objector's land" – this is not sufficient for water service providers operating critical infrastructure, refer to case law on point. The provision needs to include the words "or infrastructure" after the words "objector's land".
2.30 Time for giving objection to carrier	• Repeat and rely on comments made at 2.26 above. • current timeframes are unworkable. 20 business days is common in other industry groups – this should be introduced for water service providers to assess and provide a permit for approved deployment activities. In the case of complex or unusual applications, a water service provider can request further time to assess the proposed deployment including whether the water service provider (as a public utility) requires the carrier to enter into an agreement. The onus should be on a carrier to demonstrate that it has made reasonable efforts to engage with the water service provider (in particular in the case of a public utility). A carrier would not be able to commence the deployment specified in the LAAN until it seeks and has obtained the written approval from the water service provider to do so. If a carrier is dissatisfied with a decision (objection) from water service provider not to proceed it can then refer the water service provider's objection to the TIO.
2.31 Activity after objection	• Situation 2 – in the case of water service provider public utility, should not proceed until approval with or without conditions is received from the owner/occupier subject to the timely provision of information and engineering assessment required by the water service provider to make informed decisions.
Part 3 Additional carrier conditions **3.13 Co-location** 3.14 Cooperation about activities	• Subsection 3.13(1)(b) "a facility of a public utility" – water service providers request this be amended as they want the right of first refusal to ensure the protection of critical infrastructure and so that water service providers can carry out their operations and statutory functions unfettered. • Subsection 3.14(a) – "similar activity" be limited to that of "another carrier" only. • Water service providers previously made submissions for water service provider co-location sites, carrier deployment is made directly onto telecommunication monopoles/towers instead of public utility infrastructure if requested by a water service provider – this would provide a water service provider with a level of confidence – water service providers can undertake their operational and statutory functions unfettered (for example, ensure infrastructure not impacted, water quality and workers safety risks are maintained and minimised).

3.42 Agreement on alternative notification arrangements 3.34 Additional arrangements for serving notices	• Repeat and rely on comments at 2.26 and 2.27 above.

Part 2 Conditions in the Act for carrier conduct	• Water service providers repeat and rely on previous submissions made in relation to temporary facilities – namely, 1. The role out of temporary facilities should not impact on the operations of a public utility or its operations including during emergency and natural disaster events. It is important that any deployment of temporary facilities does not conflict with a public utility's procedures for emergency situations or natural disaster events. Carriers needed to consult with landowners and agree on site siting/location before any deployment. 2. Overcrowding concerns – it appears from the wording that more than one carrier will be able to deploy temporary facilities on the same land at the same time – this could cause overcrowding and access and worker safety concerns – limitations should be provided for in the exposure drafts – suggest carriers be required to co-locate on the same temporary facility structures where possible. 3. There are also EME concerns for the landowner and users of the land with the deployment of temporary facilities on operational sites of a public utility. RF EME consideration need to be considered. Will carriers be required to update the RFNSA and site safety reports? Carriers should be made to produce a RF EME site report available for landowner and users of the site to use and rely upon. Do these temporary facilities come with existing specification showing EME levels affixed/mounted to the facilities? 4. Deployed temporary facilities should be clearly labelled with owners' details (name and contact details) as per previous submission. 5. A mechanism for dealing with disputes regarding the deployment of temporary facilities for emergency events between carriers and landowners needs to be considered. Landowner given rights to refer disputes to the Australian Communication and Media Authority (**ACMA**) for resolution including breaches of the Telco Act or where services cannot be restored after a sufficient/reasonable period of time. 6. Section 4.3A (Carrier to remove temporary facility) – as worded the carrier is only obliged to remove a temporary facility within 28 days after the facility ceases to be "*needed*". This wording could lead to misuse in that a carrier may intentionally delay the need. This could cause business interruption, nuisance or inconvenience for a landowner. As per previous comment, landowners need to be given

	rights to refer disputes to ACMA for determination. Landowners should be able to be compensated or paid rental (as per previous submissions) for business interruption etc. Landowner may need to be compensated if additional works, activities or cost is incurred as a result of a carrier's temporary use of the land or its facilities for example: a. possible connections to landowner's supply of mains power; b. review of risk and hazards created by the temporary facility; c. additional security requirements; d. possible complaints; e. potential incompatible use pollution/ contamination of drinking water – (for example, noise and fumes generated if unit not connected to grid power e.g. diesel generator). 7. The intent of the amendments will also allow carriers to deploy temporary facilities in certain circumstance peak holiday periods, and major sporting, cultural and other events without complying with state/territory planning requirements. By adding the peak holiday periods and major sporting, cultural and other events in this amendment bundle, and then stating the carrier is only obliged to remove a temporary facility within 28 days after the facility ceases to be "*needed*", means the carriers could delay removing the temporary facilities especially if another event is coming up in 28 days. This should be separated from the emergencies and maintenance aspect as these are situations which can be planned for. 8. Section 4.10 – record keeping – in addition to the requirements proposed (which is acceptable) suggest carriers also be required to keep records of: a. consultation with landowner; b. details of, for whom/service/entity the temporary facility was required for. This will ensure the 'original' purpose for installation does not alter; and c. EME guide for the temporary facility. 9. There needs to be some undertaking that service connections, in particular where and how will carriers get their mains power supply? They must follow landowner conditions when working near public utility infrastructure (for example water assets i.e. excavating for conduits/power). There have been instances where carriers have laid on top of water assets. Temporary facilities (including buried infrastructure) needs to be removed upon completion of the need (please see previous submission for

	removal of redundant equipment). Carriers cannot leave them in case they have another "event" potentially restricting where a public utility landowner can locate its equipment on the land. 10. A full set of plans and engineering certification (if impacting on public utility infrastructure) should be provided.
Part 3 Additional carrier conditions 4.13 Co-location 4.14 Cooperation about activities	• Subsection 4.13(b) "a facility of a public utility" – water service providers request this be amended as we want the right of first refusal to ensure the protection of critical infrastructure and water service providers can carry out their operations and statutory functions unfettered. • Subsection 4.14(a) – "similar activity" be limited to that of "another carrier" only. • Water service providers previously made submissions for water service provider co-location sites, carrier deployment is made directly onto telecommunication monopoles/towers instead of public utility infrastructure if requested by a water service provider – this would provide a water service provider with a level of comfort – water service providers can undertake their operational and statutory functions unfettered (for example, ensure infrastructure not impacted, water quality and workers safety risks are maintained and minimised).
Part 5 General notification arrangements and objections to low-impact facility activities **4.22 Application of Part 5**	• Subsection (1) "disaster declaration" – repeat and reply on comments at 2.21 above. • Subsection (2) "safety or life or property is endangered" – this is limited as it does not provide for the protection of essential water service or critical infrastructure operated by public utilities. • Subsection (3) "if an owner or occupier of the land has asked the carrier to engage in the activity" – this should be done outside of the entirety of schedule 3. Seqwater seeks clarity in the Exposure Draft on whether this is then deemed to be a non- Schedule 3 type installation.
4.25 Serving notices if occupier unknown	• "the carrier may treat the land as unoccupied" – the provision could lead to misuse especially if notices are just left a gate or the owner is away etc.
4.26 Notices to owner and occupier of land: additional requirements	• Repeat and reply on comments at 2.24.
4.26A Withdrawal of notices	• Repeat and reply on comments at 2.25A

4.27 Agreement on alternative notification arrangements 4.28 Additional arrangements for serving notices	• Repeat and reply on comments at 2.26 and 2.27 above.
4.30 Reasons for objection	• Repeat and rely on comments at 2.29.
4.31 Time for giving objection to carrier	• Repeat and rely on comments at 2.30
4.32 Activity after objection	• Repeat and rely on comments at 2.31
4.36 Request to refer to Telecommunication Industry Ombudsman 4.36A Referral of matters by carrier to Telecommunication Industry Ombudsman	• Clarification needed as to whether a non-referral by a carrier can be treated by an owner/occupier as a withdrawal of the notice. • Request a further provision that a carrier cannot proceed with the activity if the carrier does not refer the matter.
4.37 Compliance with directions of Telecommunication Industry Ombudsman	• Please clarify what avenue is available for owner/occupiers in situations where the Telecommunication Industry Ombudsman does not have jurisdiction.
6.1 Purpose of Chapter 6	• Subsection (1) – a further provision be included to require compliance with the National Construction Code – repeat and rely on comment at 1A.1 above.
6.2 Maintenance activity	• Does not provide for the removal activity. Water service providers have previously made submissions requesting redundant equipment be deal with.
Part 2 Conditions in the Act for carrier conduct	• Repeat and reply on comments at 1A.1 and Chapter 4 Part 2 above.
Part 5 General notification arrangements and objections to maintenance activities	• Repeat and rely on comments made at 2.20 above.
Division 1 Introduction 6.21 Applications of Divisions 3, 4 and 5 of Part 5	• Repeat and reply on comments made at 2.20 and 2.21 above.
Division 2 Notification requirements of clauses 17 and 54 of Schedule 3	• Repeat and reply on comments made at 2.22 above.

6.22 Notice to owner and occupier of land	
6.23 Serving notices if owner unknown 6.24 Serving notices if occupier unknown	• Repeat and rely on comments made at 2.23 above.
Division 3 Additional notification arrangements 6.25 Notice to owner and occupier of land: additional requirements	• Repeat and rely on comments made at 2.24 above.
6.25A Withdrawal of notices	• Repeat and rely on comments made at 2.25A above.
6.26 Additional arrangements for servicing notices 6.27 Agreement on alternative notification arrangements	• Repeat and reply on comments at 2.26 and 2.27 above.
Division 4 Objection made to carrier 6.28 Objection to maintenance activity 6.29 Reasons of objection	• Repeat and reply on comments at 2.29 above.
6.30 Time for giving objection to carrier	• Repeat and reply on comments at 2.30 above.
6.31 Activity after objection	• Repeat and reply on comments at 2.31 above.
Division 5 Objection made to Telecommunication Industry Ombudsman	• Repeat and reply on comments made at 4.36 above.
6.35 Request to refer objection to Telecommunication Industry Ombudsman	• Repeat and reply on comments at 4.36 above
6.35A Referral of matters by carrier to Telecommunication Industry Ombudsman Telecommunication Industry Ombudsman	• Repeat and reply on comments at 4.36A above.

6.36 compliance with directions of the Telecommunication Industry Ombudsman	• Repeat and reply on comments at 4.37 above

Annexure A - Table of Comments to Amendments to Code of Practice and LIFD

Amendments to the LIFD Determination 2021

Proposed	Comments

3.2 Certifiable Facilities (1) The following facilities are a ***certifiable facility***: (a) a facility described in column 2 of Items 1 to 7, 12 and 13 of Part 1 to the Schedule; (b) a radiocommunications facility described in column 2 of Item 8(a) of Part 1 to the Schedule; (c) a cabinet described in column 2 of Item 8(b) of Part 1 to the Schedule, unless: (i) the cabinet is located on the ground; or (ii) the cabinet is to be attached to a structure which is owned by the carrier; (d) a roadside cabinet described in column 2 of Item 2 of Part 3 to the Schedule; and (e) a solar panel described in column 2 of Item 7 of Part 3 to the Schedule, unless: (i) the solar panel is located on the ground; or (ii) the solar panel is to be attached to a structure which is owned by the carrier. Note: See the *Telecommunications Code of Practice 2021* for conditions that apply to a certifiable facility.	• Repeat and rely on previous comments made above in response to 1A.7.

7 Schedule, Part 8 Co-located facilities (after table item 2)	• "public utility structure" - – water service providers request this be amended or deleted as they want the right of first refusal to ensure the protection of critical infrastructure and water service providers can carry out their operations and statutory functions unfettered. • Water service providers previously made submissions for water service provider co-location sites, where requested by water service provider carrier deployment is made directly onto telecommunication monopoles/towers instead of public utility infrastructure if requested by a water service provider – this would provide a water service provider with a level of confidence– water service providers can undertake their operational and statutory functions unfettered (for example, ensure infrastructure not impacted, water quality and workers safety risks are maintained and minimised).

5 Schedule, Part 1 – Radio facilities (table item 12)

Repeal item, substitute:

12	An extension to a tower if: (a) the height of the extension does not exceed 5 metres; and (b) either:	Commercial Industrial Rural

Seqwater does not support for antenna protrusions to be extended to a height of 5 metres where equipment has been deployed onto public utility infrastructure for the following reasons:

- many existing carrier installations on or within public utility infrastructure (for example, drinking water reservoirs) are unlikely to meet formal engineering assessment and certification (for example, under the RPEQ system which operates in Queensland);
- drinking water reservoirs constructed prior to the Telco Act are not designed to support additional load (live and wind) from carrier installation and the weight of people working on them – this becomes more problematic where there are a number of carriers and overcrowding exists on roof tops. If each carrier was allowed to extend their height of each piece of equipment - this would place further loads on a structure which may already be overloaded or does not provide sufficient operational requirements for a water service provider – this can compromise the structural integrity of the structure;
- places drinking water supply at increasing risk of contamination and has the potential to impact on public health (for example, birds roosting on antennas and defecating on reservoir roofs can place the drinking water at risk to the community);

13	Radiocommunications lens antenna: (a) the volume of which is not more than 4 cubic metres; and (b) if the radiocommunications lens antenna is attached to a structure – protruding from the structure by not more than 5 metres; and (c) either: (i) colour matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local government authority.	Industrial Rural

- equipment that needs to be maintained and regulated and increases the risk for potential storm damage and lightning strikes (if appropriate lightening protection measures are not included in the design and installation of carrier equipment) and site overhead hazards;
- asset and site maintenance cost would be further increased and added to the burden of the asset owners due to the need to implement higher and more complicated access to sites where ongoing operational and urgent maintenance is required;
- visual impact. Seqwater sites are predominately located in high growth regions with dense population;
-

7 Schedule, Part 8 – Co-located facilities (after table item 2)

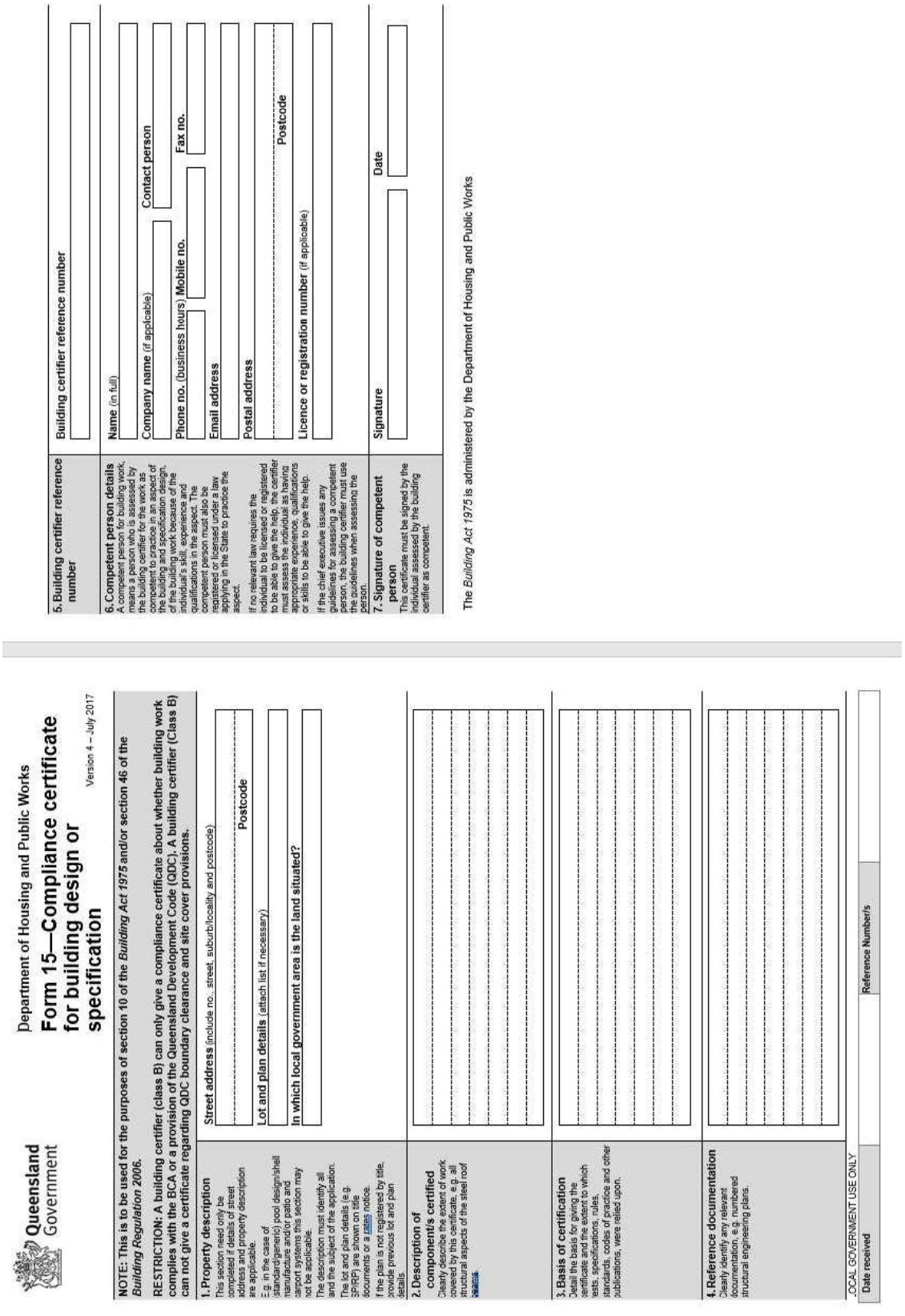
Insert:

3	Facility mentioned in: (a) Part 1, 6 or 7; or (b) item 3 of Part 4; installed on or within: (c) an original facility; or (d) a public utility structure; where: (e) the total co-location volume of the co-located facilities is no more than 50 per cent greater than the volume of the original facility or the original infrastructure; and (f) the levels of noise that are likely to result from the operation of the co-located facilities are less than or equal to the levels of noise that resulted from the operation of the original facility or the public utility structure.	Commercial

- "public utility structure" should be excluded and water service providers given the right of first refusal.

Annexure B – Refer to Seqwater's Submissions to Improving Telecommunications Powers and Immunities Framework.

Annexure C - Form 15 – Compliance certificate for building design or specification (produced by Queensland Government, Department of Housing and Public Works)



Queensland Government

Department of Housing and Public Works

Form 15—Compliance certificate for building design or specification

Version 4 – July 2017

NOTE: This is to be used for the purposes of section 10 of the *Building Act 1975* and/or section 46 of the *Building Regulation 2006*.

RESTRICTION: A building certifier (class B) can only give a compliance certificate about whether building work complies with the BCA or a provision of the Queensland Development Code (QDC). A building certifier (Class B) can not give a certificate regarding QDC boundary clearance and site cover provisions.

1. Property description
This section need only be completed if details of street address and property description are applicable.
E.g. in the case of (standard/generic) pool design/shell manufacture and/or patio and carport systems this section may not be applicable.
The description must identify all and the subject of the application.
The lot and plan details (e.g. SP/RP) are shown on title documents or a rates notice.
If the plan is not registered by title, provide previous lot and plan details.

Street address (include no., street, suburb/locality and postcode)

Postcode

Lot and plan details (attach list if necessary)

In which local government area is the land situated?

2. Description of component/s certified
Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof [details].

3. Basis of certification
Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon.

4. Reference documentation
Clearly identify any relevant documentation, e.g. numbered structural engineering plans.

LOCAL GOVERNMENT USE ONLY

Date received | Reference Number/s

5. Building certifier reference number

6. Competent person details
A competent person for building work, means a person who is assessed by the building certifier for the work as competent to practice in an aspect of the building and specification design, of the building work because of the individual's skill, experience and qualifications in the aspect. The competent person must also be registered or licensed under a law applying in the State to practice the aspect.
If no relevant law requires the individual to be licensed or registered to be able to give the help, the certifier must assess the individual as having appropriate experience, qualifications or skills to be able to give the help.
If the chief executive issues any guidelines for assessing a competent person, the building certifier must use the guidelines when assessing the person.

Name (in full)

Company name (if applicable) **Contact person**

Phone no. (business hours) **Mobile no.** **Fax no.**

Email address

Postal address

Postcode

Licence or registration number (if applicable)

7. Signature of competent person
This certificate must be signed by the individual assessed by the building certifier as competent.

Signature **Date**

The *Building Act 1975* is administered by the Department of Housing and Public Works

Annexure D - Form 16 – Inspection Certificate produced by Queensland Government, Department of Housing and Public Works

Queensland Government

Department of Housing and Public Works

Form 16—Inspection Certificate/Aspect Certificate/QBCC Licensee Aspect Certificate (Version 5 – July 2017)

NOTE: This form is to be used for the purposes of section 10(c) and 239 of the *Building Act 1975* and/or sections 32, 35B, 43, 44 and 47 of the *Building Regulation 2006*.

1. Indicate the type of certificate

The stages of assessable building work are listed in section 24 of the Building Regulation 2006 or as conditioned by the building certifier. An aspect of building work is part of a stage (e.g. waterproofing).

- ☐ Inspection Certificate for
- ☐ Stage of building work (for single detached class 1a or class 10 building or structure)
  (indicate the stage) _____
- ☐ Aspect of building work
  (indicate the aspect) _____
- ☐ QBCC Licensee Aspect Certificate

Scope of the work

Scope of the work covered by the licence class under the *Queensland Building and Construction Commission Regulation 2003* for the aspect being certified, e.g. scope of work for a waterproofing licence is "installing waterproofing materials or systems for preventing moisture penetration". An aspect being certified may include "wet area sealing to showers".

2. Property description

The description must identify all land the subject of the application. The lot and plan details (e.g. SP/RP) are shown on title documents or a rates notice. If the plan is not registered by title, provide previous lot and plan details.

Street address (include no., street, suburb/locality and postcode)

Postcode

Lot and plan details (attach 1st if necessary)

In which local government area is the land situated?

3. Building/structure description

Building/structure description | **Class of building/structure**

LOCAL GOVERNMENT USE ONLY

DATE RECEIVED | REFERENCE NUMBERS

4. Description of component/s certified

Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.

5. Basis of certification

Detail the basis for giving the certificate and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon.

6. Reference documentation

Clearly identify any relevant documentation, e.g. numbered structural engineering plans.

7. Building certifier reference number and development approval number

Building certifier reference number | **Development approval number**

8. Building certifier, competent person or QBCC licensee details

Name (in full)

Company name if applicable | **Contact person**

Phone no. (business hours) | **Mobile no.** | **Fax no.**

Email address

Postal address

Postcode

Licence class | **Licence number**

Date approval to inspect received from building certifier

A competent person must be assessed as competent before carrying out the inspection.

The builder for the work cannot give a stage certificate of inspection.

A competent person is assessed by the building certifier for the work as competent to practice in an aspect of the building and specification design, because of the individual's skill, experience and qualifications. The competent person must be registered or licensed under a law applying in the State to practice the aspect.

If no relevant law requires the individual to be licensed or registered, the certifier must assess the individual as having appropriate experience, qualifications or skills to be able to give this help.

If the chief executive issues any guidelines for assessing a competent person, the building certifier must use the guidelines when assessing the person.

9. Signature of building certifier, competent person or QBCC licensee

Note: A building certifier must sign this form for temporary swimming pool fencing under section 4 of Schedule 1 of QDC MP 3.4.

Signature | **Date**

The *Building Act 1975* is administered by the Department of Housing and Public Works

Annexure E - Seqwater Engineering Statement for Design (ES1)

Asset Management – Template
X-TMP-STD-005 Engineering Statement - ES1 – Design

seqwater WATER FOR LIFE

PURPOSE	This form is for the purpose of documenting that built asset creation or modification requiring, or based on, the application of engineering principles have been performed by a competent person in accordance with the *Professional Engineers Act 2002 (QLD)*. Refer Seqwater Procedure PRO-01617 Engineering Review and Approval for further guidance on when this form should be used.
ES1.1 – Asset Description The description must identify all aspects of the asset that are covered under this statement.	Asset Name *(include facility and specific area of work)* Project Name *(if applicable)*
ES1.2 –Statement Type Identify if this statement relates to approval of a design or the performance of a design review.	Competed as: **Designer** ☐ **Design Reviewer** ☐ Design Status: **Preliminary Design** ☐ **Detailed Design** ☐
ES1.3 – Scope of Engineering Statement Clearly describe the extent of engineering work covered by this certificate, e.g. all mechanical aspects of the raw water pump station.	
ES1.4 – Reference Documentation Clearly identify any relevant documentation, e.g. drawings, specifications, standards engineering plans. NOTE: Any risk registers that are to be carried from design to construction should be listed here.	
ES1.5 – Basis of Approval Detail the basis for giving the statement and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon. Also include references to any other RPEQ and their RPEQ# that may have been relied upon.	
ES1.6 – Hazard and Value Analysis Risk assessment process & studies to ensure the Health & Safety, Environment, Production and Commercial Risk associated with the modification or the impacts on existing plant are fully identified & managed. External – Refer AS IEC 61882-2003 (R2013) – Hazard and operability studies (HAZOP studies) - Application guide Internal - Refer to Seqwater Engineering Technical Hazard Study Guideline TRIM D14/29830.	Hazard Study 1 – Preliminary Design (eg HAZID) Yes ☐ N/A ☐ *(if N/A state reason)* Hazard Study 2/3 – Detailed Design (eg HAZOP, CHAIR, CHAZOP, etc.) Yes ☐ N/A ☐ *(if N/A state reason)* WHS Risk assessment? *(Refer TEM-00006)* Yes ☐ N/A ☐ *(if N/A state reason)* Details *(include reference to any Hazard and Value Engineering undertaken and consultation with Seqwater WHS)*
ES1.7 – Competent Engineer Details A competent engineer for this statement, means an RPEQ. The Professional Engineers Act 2002 defines a 'professional engineering service' as 'an engineering service that requires, or is based on, the application of engineering principles and data to a design, or to a construction or production activity relating to engineering, and does not include an engineering service that is provided only in accordance with a prescriptive standard.' Include references to any other RPEQ and their RPEQ# that may have been relied upon in Section *ES1.5 Basis of Approval*.	Name *(in full)* Company name *(if applicable)* RPEQ# Phone no. *(business hours)* Mobile no. Email address
ES1.8 – Competent Engineer Declaration This form does not replace any other necessary certificates, statements or approvals necessary to meet regulatory or contractual obligations of the designer.	I believe on reasonable grounds that the design for this asset modification to date, in accordance with the drawings, specifications, and other documents provided or listed in this statement, a) complies with the requirements of the *Professional Engineers Act 2002* (QLD and the associated Code of Practice for Registered Professional Engineers (2008); and that b), the persons who have undertaken the design have the necessary competency to do so.
ES1.9 – Signature of Competent Engineer	Signature Date
ES1.10 – Seqwater Receiver Details of the Seqwater representative (eg Planner or Project Manager) receiving this statement. Listing of an Seqwater representative does not confirm Seqwater's acceptance of the project or replace any contractual arrangements in place for handover or award of practical completion.	Name Position Title

Annexure F - Seqwater Engineering Statement Construction (ES2)

Asset Management – Template
X-TMP-STD-006 Engineering Statement – ES2 – Construction Review

PURPOSE	This form is for the purpose of documenting that built asset creation or modification requiring, or based on, the application of engineering principles have been performed by a competent person in accordance with the *Professional Engineers Act* 2002 (QLD). It should be used to confirm that at the end of construction the necessary engineering approvals have been received for any design modifications undertaken in the construction process. Refer Seqwater Procedure PRO-01017 Engineering Review and Approval for further guidance on when this form should be applied.
ES2.1 – Asset Description The description must identify all aspects of the asset that are covered under this statement.	Asset Name *(include facility and specific area of work)* Project Name *(if applicable)*
ES2.2 –Statement Type Identify if this statement relates to completion of construction or progress assessment of construction.	Construction Status: **In Progress** ☐ **Complete** ☐
ES2.3 – Scope of Engineering Statement Clearly describe the extent of engineering work covered by this certificate, e.g. all mechanical aspects of the new water pump station.	Details *(include details on any design modifications that may have been made during the design)*
ES2.4 – Reference Documentation Clearly identify any relevant documentation, e.g. drawings, specifications, standards engineering plans. NOTE: Any risk registers that have been carried from design to construction should be listed here.	
ES2.5 – Basis of Approval Detail the basis for giving the statement and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon. Explain the level of monitoring and observation carried out. Also include references to any other RPEQ and their RPEQ# that may have been relied upon.	
ES2.6 – Hazard Analysis Risk assessment process & studies to ensure the Health & Safety, Environment, Production and Commercial Risk associated with the modification or the impacts on existing plant are fully identified & managed. **External** – Refer AS IEC 61882-2003 (R2013) Hazard and operability studies (HAZOP studies) - Application guide **Internal** - Refer to Seqwater Engineering Technical Hazard Study Guideline TRIM D14/29830.	Hazard Study 4/5 – Construction/Commissioning Yes ☐ N/A ☐ *(if N/A state reason)* *(eg construction and design verification, pre-commissioning check.)* Hazard Study 6 – Operation Yes ☐ N/A ☐ *(if N/A state reason)* *(eg post start-up review, maintenance assessment etc.)* WHS Risk assessment? Yes ☐ N/A ☐ *(if N/A state reason)* *(Refer TEM-00008)* Details *(include reference to any Hazard Studies undertaken and consultation with Seqwater WHS)*
ES2.7 – Competent Engineer Details A competent engineer for this statement, means an RPEQ. The Professional Engineers Act 2002 defines a 'professional engineering service' as 'an engineering service that requires, or is based on, the application of engineering principles and data to a design, or to a construction or production activity relating to engineering, and does not include an engineering service that is provided only in accordance with a prescriptive standard.' Include references to any other RPEQ and their RPEQ# that may have been relied upon in Section *ES2.5 Basis of Approval.*	Name *(in full)* Company name *(if applicable)* RPEQ# Phone no. *(business hours)* Mobile no. Email address
ES2.8 – Competent Engineer Declaration This form does not replace any other necessary certificates, statements or approvals necessary to meet regulatory or contractual obligations of the work.	On the basis of this statement I believe on reasonable grounds that a) asset modifications have been completed in accordance with the *Professional Engineers Act* 2002 (QLD and the associated Code of Practice for Registered Professional Engineers (2008); and that b), the persons who have undertaken the work have the necessary competency to do so.
ES2.9 – Signature of Competent Engineer	Signature Date
ES2.10 – Seqwater Receiver Details of the Seqwater representative (eg Planner or Project Manager) receiving this statement. Listing of a Seqwater representative does not confirm Seqwater's acceptance of the project or replace any contractual arrangements in place for handover or award of practical completion.	Name Position Title

Annexure G – Australian Defence, Defence Labelling Standards

DEFENCE LABELLING STANDARDS
EQUIPMENT AND EQUIPMENT SYSTEMS

Equipment Labelling

1. All Equipment items shall be physically labelled with the GEMS Identifier (Id) from the Defence Estate Information System. The labels shall be made of a durable adhesive nature and conform with Australian Standards.

2. Each label shall display:

   a. The relevant GEMS Id (Attribute 1035) at the top of the label. In the attached example the Unique Identifier indicates Equipment Item 100015163.

   b. A barcode in the centre of the label. The Barcode shall represent the GEMS Id (Attribute 1035).

   c. The related Estate Class Id (Attribute 990) in text at the bottom of the label. The example below is - E.A.05.04. (Equipment, Airfield, Navigation Aid, Windsock). See Fig 1.

Figure 1 - Equipment Label

Equipment System Labelling

3. **Equipment System with No Child Equipment.** Equipment Systems with no children shall be physically labelled where the system requires planned maintenance or inspection eg Earthing and Bonding - ES.ELEB.

4. **Equipment Systems with Children.** Equipment Systems with children shall be physically labelled where applicable as per the Defence Equipment Rules (Attachment 1). For example, it would be appropriate to apply a label to a Fire Sprinkler System because there is child equipment related to a Fire Sprinkler System. It is beneficial to uniquely identify the system and it is possible to physically apply a label in the Fire Sprinkler System control room and on the child equipment.

Defence Equipment Labelling Standards

5. The format of the label shall be the same as described for Equipment Labelling. Each label shall display the:

a. relevant GEMS Id (Attribute 1035) at the top of the label eg the GEMS Id indicates Equipment System Item EQ 20/0129/0154 as shown in Fig 2; and

b. related Estate Classes Identifier (Attribute 990) in text at the bottom of the label eg ES.EL.LP (Equipment System, Electrical, Lightning Protection as shown in Fig 2.

Figure 2 - Equipment System Label

Equipment Item and Equipment System Label Requirements

6. The labels shall conform with Australian Standards and specifically:

a. The printing process shall be permanent, fade resistant and onto durable adhesive labels.

b. Lettering shall be no less than 5 mm in height.

c. Each label shall display 'Department of Defence' at the top of the label. The relevant GEMS Id (Attribute 1035) shall be displayed immediately underneath the 'Department of Defence'. See Figs 1 & 2.

d. Each label shall display a barcode at the centre of the label. The barcode shall be of either the 3 of 9 type (compatible with PDA hardware) or Code 128 type (compatible with pocket PC). The Barcode shall represent the GEMS Id (Attribute 1035).

e. Each label shall display the related Estate Class Id (Attribute 990) in text at the bottom of the label.

7. The label shall be adhered to a surface on the equipment or adjacent to, using discretion regarding the temperature and texture of the surface.

8. The label shall be placed in a location that is accessible for a bar code scanner and as recommended in Attachment 1 - Defence Labelling Standards.

Existing Equipment Item and Equipment System Labels – Transition to New Requirements

9. It is not envisaged that the contractor changes the existing labels to comply with the above equipment and equipment system label standard as a separate exercise. It may be practical, however, to make changes while maintenance is being undertaken on the item. The existing equipment number (legacy), eg SQ-131286, can be found in GEMS using the "Sort Field".

10. New equipment and equipment systems being brought into service are to comply with the above Defence labelling standards. Existing equipment and equipment systems that do not have a label are to be labelled as per the above Defence labelling standards.