

3 August 2018

Attention: Project Manager, Mr Craig Purdon
Communications Alliance Ltd
PO Box 444
MILSONS POINT NSW 1565

Dear Craig,

SUBMISSION: INDUSTRY CODE DR C564:2018 - MOBILE PHONE BASE STATION DEPLOYMENT

Seqwater is a:

1. Statutory Authority of the Queensland Government established under the *South East Queensland Water (Restructuring) Act 2007*; and
2. a '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.

Pursuant to *Water Supply (Safety and Reliability) Act 2008 (Qld) (Water Supply Act)* and the *Australian Drinking Water Guidelines*, Seqwater has a legislative obligation to provide (at all times) safe, secure, resilient and reliable bulk drinking water for South East Queensland. 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 Commission¹.

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.

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>.

Introduction

Thank you for this opportunity to provide feedback 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**)².

Seqwater has previously lodged submissions with the Australian Government (through Department of Communication and the Arts) opposing the *Possible amendments to telecommunications carrier powers and immunities – consultation paper* dated June 2017 (*Possible amendments*). To the extent relevant, Seqwater repeats and relies on those submissions for the basis of not supporting a number of the proposed amendments to the Proposed Deployment Code and seeking amendments to the Existing Deployment Code. 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, worker safety and Seqwater's ability to meet its legislative obligations.

For the reasons set out in this letter, we are not supportive of a number of proposed amendments. We set out below our general concerns with the Existing Deployment Code and Proposed Deployment Code.

General Concerns

Seqwater has significant concerns regarding the changes to the Proposed Deployment Code, especially how it may potentially impact critical water supply infrastructure, system operations, health and safety of workers, site security and risks to water quality.

Also, as a member of the Telecommunication Working Group and its association with peak bodies such as Qld Water Directorate, NSW Water Directorate and WSAA, Seqwater has demonstrated some of the issues impacting on its water supply reservoirs from telecommunication installations that related to telecommunication regulatory regime including the deployment of Mobile Phone Radiocommunication Infrastructure. In this regards, please see further in **Annexure A** attached to this submission.

Seqwater makes the following comments:

1. Section 1.1.2 – with the exception of Australian Local Government Association, all other voting participants of the Working Committee are comprised of carrier organisations (or organisations representing carriers). This representation is unbalanced and should have included further stakeholder engagement (included Interested and Affected Parties and public utilities etc.).
2. Section 1.3 (Scope) – Note 1 covers the work of “contractors or agents of Carriers” – this is limiting and should be extended to include the Carrier’s “employees, subcontractors and consultants”.
3. Section 1.4 (Objectives) – The objectives should be amended to include an assurance that any deployment will not interfere with the operations of a public utility and equipment installed will be adequately maintained for its full life cycle. The later is needed as Seqwater has observed with regards to telecommunication equipment, a lack of upkeep including regular inspections by

² Proposed changes do not appear to have been marked up in the Proposed Deployment Code to assist with making submissions. Recommend that this be done for future revisions.

carries on site and a lack of enforcement and independent auditing by the regulator under the telecommunication regulatory regime to ensure carrier compliance.

4. Section 2 (Definitions):

- a. Add new definition for “*Community sensitive location*” for clarity – the definition appears to be missing from the Proposed Deployment Code and there are inconsistent references to it throughout the document (for example, see clauses 4.1.4(c) and 6.1). The definition should be extended to include “*sites with drinking water reservoirs*” within its ambit. The definition should also reference an associated risk to the owner/occupier or operations of a public utility regarding its proposed deployment.
- b. “*Complaint*” – has a limited definition and should be amended to include “*any expression of dissatisfaction or grievance made in writing to a carrier, Telecommunication Industry Ombudsman or to Australian Communications and Media Authority*”. This may address any suggestion of “under reporting” of complaints to the telecommunication regulator.
- c. “*Exempt Mobile Phone Radiocommunication Infrastructure*” – delete the word “*equivalent*” and replace with “*to at least the same standard or better*”. No reference made to Australian Radiation Protection and Nuclear Safety Agency (**ARPANSA**). This should be added.
- d. “*Interested and Affected Parties*” should be amended by adding the words “*and/or owners*” after the word “*occupiers*”. It should also include “*stakeholders*” as some references to “*stakeholders*” appear throughout the proposed Deployment Code.
- e. Definitions for “*EME*” and “*RF*” appear to have been deleted from the Proposed Deployment Code and should be reinstated.

5. Section 3.2.3 – Given the impacts associated with deployment of Mobile Phone Radiocommunication Infrastructure, any notice or document should not “*be left at the premises*” as drafted. Public utility sites may be unmanned or due to the size of the organisation, not received by the proper officer etc. In the case of public utilities, any notice or document should be personally served by the carrier unless any process for receiving notices or documents has otherwise been agreed.

6. Seqwater understands that a carrier is required to comply with section 4.1 (New Site Selection) if it proposes to select a site for the deployment of Mobile Phone Radiocommunication Infrastructure. Specifically section 4.1.1(i) of that provision requires a carrier to have regard to “*the availability of land and public utilities*”. This provision mandates that a carrier ensures that it specifically identifies the physical placement of a new facility (and that this is recorded into its written procedure for site selection) on land belonging to public utilities.

As currently drafted, this encourages carriers to seek out public utility land in particular, sites where drinking water reservoir towers are located. This is further supported by wording in clause 4.1(h) where a carrier must have regard to the “*physical characteristics of the locality including elevation and terrain*” given that drinking water reservoirs are predominantly located in areas of high elevations. In this regard, there is inadequate protection of worker safety and water quality and the ability of public utilities to meet their legislative obligations. We ask that clause 4.1.4(i) be amended by adding the words to the end of the clause “*but avoiding drinking water reservoirs and associated drinking water infrastructure*”. The same amendment should be added to the end clause 4.1(m) for the purposes of co-location of facilities.

7. Clause 4.1.4 (c) – the “*NOTE*” provided be amended to include “*sites with drinking water reservoirs*” as an example of community sensitive location.

8. Clause 4.1.4(b) – the standard provided is deficient and in the case of public utilities places its workers at an unacceptable risk (including over exposure to EME). In particular workers and contractors who are required to access and maintain water reservoirs. Carriers are reluctant to allow public utilities to shut-down reservoirs so that so that workers can safely access and carry out operations and maintenance of its water reservoirs. This we understand is on the basis that carriers operate under conflicting obligations to ensure that service coverage is maintained without any outages. It is obvious that the dissimilar obligations cannot co-exist on drinking water reservoirs and associated infrastructure without compromising safety and water quality risks.
9. Section 4.1.4 (e) – the telecommunication regulatory regime is not compatible with state and local government planning policies with regards to affecting operations of water supply facilities. This impacting on the health and safety of water supply workers, site security requirements for critical infrastructure and essential services, public health and potential risks to water quality. The liability and costs of such impacts to water supply operations is often borne onto the public utility (having to absorb these costs) often associated with the inconsistencies of state and commonwealth legislation and policy.
10. Clause 4.1.4(k) – be amended by adding the words to the end of the clause “*in particular, telemetry services used by public utilities for operational or business purposes*”.
11. Section 4.1.4 (n) – in the case of public utilities, the “*costs factors*” should include additional costs it is required to absorb associated with Telcommunication installations (via asset management, replacement, augmentation and improved structural integrity etc.). Public utilities are not budgeted for these costs.
12. Add new clause 4.1.4(o) – to include other risks determined or considered by Interested and Affected Parties including risks associated with the operations of a public utility.
13. Clause 4.2.3 - The written procedures for designing Mobile Phone Radio-communications Infrastructure should include at the carrier’s cost regular on-site testing during commissioning, and routine independent EME testing thereafter to reduce EME risks to facility operators. Our concern is that there might be significant differences between the theoretical and actual field mapping of EME. New clause 4.2.3(g) should be added to ensure a carrier at its own cost, provides for separate and independent power supply so as not to impact of the operation of public utilities.
14. Clauses 4.3.3 and 4.3.5 – It is not appropriate for a carrier to restrict general public access to operational areas of public utilities. Such limitation potentially place public utilities in breach of legislative obligations (for example, in the case of water utilities in providing safe drinking water). Further, workers and contractors are required to accessing areas of a reservoir to: to install water supply equipment, inspect bird proofing of roof fascia, roof drainage, roof and wall structural integrity, inspect protective coatings and water tightness. This impacts on the operations of public utilities.
15. Clause 4.3.6 – The carrier should also ensure that “*technical staff*” are also trained in any other requirement relevant to the activities and operations of public utilities (for example, water quality and site access requirements).
16. Add new clause 4.38 – The carrier must ensure that that RF transmission equipment no longer in service is removed and the land is restored to the same condition before the installation at the carrier’s cost and to the satisfaction of the landowner/occupier/public utility.

Landowners/occupier/public utilities should be fully compensated for any out of pockets. A timeframe should also be provided. Suggest the clause read as follows:

“Unless the Interested and Affected Party has agreed otherwise, the carrier must at its cost:
(a) removal RF transmission equipment no longer in service within 25 Business Days;
(b) Restore land (including removal of buried cables/telecommunication infrastructure) to the satisfaction of the Interested and Affected Party.”

Penalties should be imposed for non-compliance with this clause.

17. Add new clause 4.39 - The landowner/occupier/public utility should also have the right to remove (and if required the right to shut down power supply if equipment is live) any redundant equipment or unknown equipment so that it is not in breach of the Criminal Code where the Landowner/occupier/public utility has made genuine efforts to ascertain or locate the owner of the equipment.
18. Clause 5 (Small Scale Infrastructure) – a process of objecting by landowner/occupier of land should be available for small scale infrastructure in particular public utilities should be given the right to object where in the opinion of the public utility reasonably believes the installation is likely to effect its operations.
19. Clause 6 (Consultation Requirements for Installation at a new site without development application) – the process contemplated does not provide Interested and Affected Parties (including stakeholders and public utilities) with sufficient time (and consultation is made by the carrier) to consider a carrier’s application. “10 Business Days” specified in clause 6.2.4 should be amended from “10 Business Days” to at least “20 Business Days” if not more. In the case of public utilities, stakeholder engagement and other users of its sites need to be carried out. There should be flexibility for public utilities to be able to extend this timeframe where there may be unusual circumstances or the application is complex.
20. New Section 6.1.2(d) be added requiring a carrier to demonstrate that an installation will not impact of the operations of a public utility (such as operations, asset management, health and safety of the workers and contractors, water quality, future planning/expansion of the site). The onus should be placed on the carrier (and its cost) to assess impacts of any installation in consultation with the public utility. In the case of water utilities, where the installation is considered by the public utility to pose and unacceptable risk then the proposal should not proceed. This will assist local water utilities in meeting their operational and health legislative requirements.
21. Clause 6.3.1 – the information provided by carriers should also include its full risk assessment and risk mitigation strategies. Where requested by a public utility, a carrier must provide evidence that its holds (and maintains for the life of any installation) sufficient insurance in place to the satisfaction of the public utility.
22. Clause 6.3.6 – in the case of public utilities the process of sending of letters, should be to its authorised officer unless agreed otherwise beforehand.
23. Clause 6.4.3 – the carrier should only be able to proceed where the public utility has consented to the proposed construction.

24. Clause 6.3.22(e) – in some instances pertaining to specific sites “*mutually acceptable outcomes on projects*” are difficult or cannot be achieved (for example, drinking water reservoirs). There are concerns that the carrier will develop its consultation plan in its favour despite the views of the public utility. It is important that any disputes can be referred to ACMA.
25. Clause 7 – “*large physical separation between facilities on a premises*” does not appear sufficiently defined. Clarity is needed.
26. Clause 7.1 - in the case of public water utilities, the provision should be amended to include the following:
 - a. an assurance from the carrier that it will not do anything which in any way poses a risk of contamination of the drinking water supply;
 - b. full detailed drawings and specification including the location of underground services;
 - c. particulars of materials to be used; and
 - d. any other information requested by the public utility so that the application can be assessed; and
 - e. where a carrier proposes to host equipment onto public utility infrastructure, the carrier must provide to the public utility and to council an engineering assessment of the public utilities infrastructure confirming that the public utility infrastructure will not:
 - i. be structurally impacted by the carrier’s installation;
 - ii. impede a public utilities use of its public utility infrastructure for its operational and business purposes; and
 - iii. interfere with a public utility’s telemetry equipment.
 - f. A carrier should also provide evidence of insurance (as per point 21 above) and if requested, provide written an indemnity and release in favour of the public utility to limit exposure to public utilities caused by carrier installation.
27. Clause 7.3 – The carrier should also have regard to any comments received from Interested and Affected Parties in particular the case of public utilities and stakeholders.
28. Clause 8 (Radio Emissions and Health and Safety Information) – clause 8.1.2. - should be amended to require a carrier to accurately update the EME Guide for Site Safety for specific sites of public utilities. The clause should also be mandatory for a carrier to provide a copy of the EME Guide for Site Safety to the owner/occupier of the specific site within say 10 Business Days of updating.
29. Clause 9 (Complaint handling) – the provision should include a requirement that the installation cannot proceed until the complaint has been resolved. Clause 9.2.5 the making of numerous complaints regarding the same facility by the same complainant is treated as one complaint. This encourages carriers to under report. This could misrepresent the true events.
30. Appendix A - The Precautionary Principal – risk assessment is not a full or proper risk assessment. Risk has been confined and limited to “*available scientific evidence, with cost of commercial adjustment by the Carrier*” and also limited to “*EME*”. This cannot be a balanced approach as other risks need to be taken into account by the carrier (such as operational risks for an Affected and Interested Party including public utility). There are concerns that in the absence of scientific evidence and consideration of costs, the carrier can proceed with the installation. This should not be the sole consideration.
31. Appendix B - ARPANSA EME Report Format – Seqwater has observed that EME reports produced by or on behalf of carriers are deficient/incorrect/inadequate. It is important when these reports

are prepared that carriers are made to undertake site inspections (as opposed to desk top studies) to ensure proper capture of information for site safety record purposes and reliance by all persons using the site.

32. Appendix F – RF Warning Signs – Seqwater has observed that some of the signage used by carriers are deficient or do not display the correct information causing delays and compromising site safety. Specific and up-to-date contact details for each carrier (this is very important where there are a number of carriers on the same RFNSA site) to be displayed – this should include a name/telephone number and email address. This information should be regular checked by carriers to ensure that it is up to date and Interest and Affected Parties (including public utilities) have been advised. Penalties should be imposed on carriers if this is not done.
33. A new provision needs to be added to require proper labelling of any installation with carried details. Labels should regularly be checked and repaired, update etc. as made be required by carriers. Penalties should be imposed for non-compliance with this clause.

In summary, Seqwater supports the installation on telecommunications infrastructure in the community, but has concerns if such infrastructure compromises 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 (see for example, Annexure A which highlights a case Seqwater is currently dealing with which has resulted in an Improvement Notice being issued against Seqwater by the Workplace Health and Safety Queensland).

In addition to the comments listed above, Seqwater seeks that the Working Committee (and decision makers including the Minister) ensure:

- drinking water supplies are protected from any risk of contamination;
- workers are safe from harm cause by carrier installations; and
- water utilities can meet their legislative obligations under relevant State legislation.

This view is supported by the water industry, in particular WSAA.

Please contact Carmel Serratore, Legal Counsel if you require any further information on carmel.serratore@seqwater.com.au.

Yours sincerely,
Carmel Serratore

Annexure A - Seqwater - Alexandra Hills Reservoir High Water Tower located at RFNSA Site No. 416001

On 4 September 2015, the Alexandra Hills Reservoir Reserve vested in Seqwater (as trustee of Reserve 13921) upon which the high-level tower reservoir is located. The Reserve is subject to the requirements of the *Land Act 1994 (Qld)*. As part of the asset transfer, rights and obligations associated with existing telecommunication facilities/low impact facilities (which are hosted) to the reservoir tower were transferred to Seqwater (see Photograph No. 1 below). Carriers have equipment embedded on top, to the side and within the tower.



Photograph No. 1 - Aerial view of Alexandra Hills High Level Reservoir Tower

Seqwater has observed that carriers are not keeping the safety and operation information relating to the facilities on the RFNSA. The records housed by the RFNSA are in Seqwater's view not accurate. In fact a recent carrier commission site safety report displays many errors with equipment listed therein. A number of assets on the reservoir roof have unknown owners. Seqwater cannot remove the unknown equipment identified in its audit on the basis that it is a criminal offence if a person tampers with, or interferes with, a facility owner or operated by a carrier under section 474.6 (Interference with facilities) of the *Criminal Code Act 1995 Cth*. Seqwater has approached the telecommunications regulator (ACMA) to assist with identifying unknown owners. ACMA assistance is qualified that it cannot compel the removal of unknown assets. This ultimately will require Seqwater to apply to the Federal Court to remove unknown assets. The other impact for Seqwater is that it cannot achieve a complete electrical shut-down of the site. Considerable effort is required to switch off all existing antennae, thus already making routine inspection, operation and maintenance of the reservoir extremely difficult for Seqwater.

It should be noted that a number of telecommunications equipment are attached to the roof safety barrier rail and that this rail used as fall protection by carriers is in poor condition and displays signs of corrosion including complete dislodgment in a section (see photograph No. 2). All carrier equipment

affixed to the rail needs to be removed before the handrail can be repaired. Access without proper assessment and PPE equipment has been classified by Seqwater as unsafe.



Photograph No. 2 - Safety barrier rail in poor condition on the roof of the Alexandra Hills High Level Reservoir Tower showing complete dislodgment in right hand bottom corner

Condition/electrical assessment/WHS assessment of the High Level Reservoir has identified various hazards with regards to the following:

- WHS Safety hazards – RF EME zone of influence is introduced for Seqwater personnel directly accessing the access hatch to the reservoir located on the roof, slips and trips (from carrier installations such as cables etc.). The safety of anyone who accesses the rooftop of the reservoir and the reservoir tower is compromised. The introduction of the RF EME hazard requires specialised control measures to be carried out by Seqwater such as training and accreditation of Seqwater workers and other personnel required who may use the hatch. These measures are not part of normal water utilities operations required of Seqwater personnel. The integrity of the handrail on the roof (see mentioned above) has been compromised to the point that it cannot be considered an effective control measure from the prevention of falls;
- Carrier equipment rooms located within the reservoir tower are not compliant with the National Construction Code/Building Code of Australia – they are constructed from combustible material and not considered to be fire rated or fire separated from the water towers single escape route from the top of tower. There is also evidence of high explosive potential – this having the potential for any fire to spread to other parts of the building. There is also no fire sealing provided by the carrier equipment within these rooms. The carrier equipment has been fitted to battery systems connected in excess of voltage and enclosed in rooms, this having the potential for a higher risk to explosion and fire risk to the reservoir facility. Further, the carrier equipment rooms located in the reservoir tower access stairs that provide the only means of access and thus escape

from the reservoir tower. Any fire within the access stair will block safe escape from the reservoir tower for any persons being in the reservoir tower above the carrier equipment rooms. This is of serious concern for Seqwater;

- Only some of the carrier equipment has lightning protection systems for surge protection devices and surge reduction filters. The lightning protection systems are not consistent and the entire installation in the water reservoir is at a higher risk to damage from direct strike event. The risk to electrical equipment installed on the roof of the reservoir tower is that in a direct strike lightning event, different voltages could occur between earthing systems on the site and these voltages could damage to electrical systems in turn may increase risk of fire in the electrical equipment located below. Any personnel working on this equipment would also be at higher risk to injuries from a direct lightning strike event;
- fire risks and potential RF EME exposure issues creates difficulties for Seqwater in carrying out many maintenance activities required to address current defects;
- core holes to the external structure and insect nests & bird droppings attributed by carrier installations – the efficacy of vermin proofing exposes Seqwater to an unacceptable level of risk of contamination entering the reservoir, potentially resulting in unsafe drinking water.

Future installations on this site will increase risk associated with resilience and current health and safety issues due to increasing both the number of people accessing the reservoir and the number of antenna installed on the reservoir.