6 March 2012

Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra
ACT 2600 Australia

Dear Committee members,

Submission in support of *Telecommunications Amendment (Mobile Phone Towers) Bill 2011* – community members' experience based on Telstra's proposed high impact mobile phone tower at Tinderbox, Tasmania

We live in Tinderbox, southern Tasmania, next door to a site where Telstra recently proposed (via a local council development application) a high-impact 34.5 m lattice mobile phone tower. Our submission to the Standing Committee, based on our experience, demonstrates how the current *Telecommunications Act 1997* is inadequate. There is also a lack of scientific consensus as to the health effects from the long-term accumulated exposure to electromagnetic radiation (EMR) from telecommunication base stations (mobile phone towers and antennae); therefore, a precautionary approach to human health exposures should be applied and, to achieve this, the *Australian Radiation Protection and Nuclear Safety Act 1998* requires amendment. We have referred below to items numbered within the Bill's 'Expanded Memorandum' and relevance to Tinderbox residents.

Our local council (Kingborough) supports the Bill's amendments, and has written letters to Tasmania's Federal Politicians in support of the Bill. I am aware of a number of other Tasmanian councils that are also supportive (e.g., Launceston, Glenorchy and Hobart City Councils). This demonstrates that this is an issue that local government believes warrants legislative change at a national level.

Schedule1 - Amend the 'Australian Radiation Protection and Nuclear Safety Act 1998'

ITEMS 1 & 2: provide for the Radiation Health and Safety Advisory Council to review the radiofrequency exposure standards every five years, with the first review completed within 6 months of the commencement of the Bill. The review must consider the standards applied by other countries and the CEO must make the report of the review public.

The regular health standard review proposed within Items 1 and 2 is required.
The *Australian Radiation Protection and Nuclear Safety Agency (*ARPANSA*)* establishes EMR exposure limits (currently set at 450 microwatts/cm2). The Standard only considers short-term thermal effects (to prevent heating of the body by 1º C); it does not consider long-term athermal risks (such as DNA damage, cancer and

other health effects). In May 2011 the World Health Organisation (WHO) upgraded the risk from EMR to "possibly carcinogenic to humans"based on the International Agency for Research on Cancer (IARC) advice (see Robert *et al.* 2011, Carcinogenicity of radiofrequency electromagnetic fields, *Lancet Oncology 12*(7), pp 624-626). The EMR cancer risk is most apparent in mobile phone use (≥ 30 minutes per day), but as yet there appears to be insufficient information to assess the risk from long-term EMR exposure from telecommunication base stations (Robert *et al.* 2011). A lack of sufficient data to draw firm conclusions about health effects from long-term, low-level EMR exposure from base stations was also a finding in a scientific peer-reviewed study by Roosli *et al.* 2010 (Systematic review on the health effects of exposure to radiofrequency electromagnetic fields from mobile phone base stations, *Bull. World Health Org.* 88, pp 887–896G, doi:10.2471/BLT.09.071852). Until conclusive information is obtained, there is uncertainty about human health impacts from living near telecommunication base-stations emitting EMR and a precautionary approach should be applied.

We suggest the Committee looks at recent scientific peer-reviewed research recommending more precautionary limits than currently set by ARPANSA given the health uncertainty, such as:

Khurana *et al.* (2010), recommending a precautionary limit of 0.1 microwatts/cm^2, see link: http://www.brain-surgery.us/Khurana_et_al_IJOEH-Base_Station_RV.pdf

Seletun Scientific Panel Statement (2010), Recommending a precautionary limit of 0.17 microwatts/cm^2, see link: http://www.helbredssikker-telekommunikation.dk/Seletun.pdf

Use of these precautionary levels should not alarm the telecommunication industry, as many installations in residential areas already operate below the precautionary 0.1 microwatts/cm^2 level mentioned above (see RFNSA website). However, **much higher EMR levels were proposed from the Tinderbox tower - up to <u>36 times higher</u> than the precautionary levels stated**. European countries have already taken a more cautious approach than Australia because of the absence of scientific consensus on the long-term effects of EMR exposure (e.g. Switzerland's standard is 4 microwatts/cm^2 – much less than Australia's standard of 450 microwatts/cm^2). The public has lost confidence in ARPANSA's EMR exposure limit; we urge the Standing Committee to support regular review of the EMR standard and adoption of precautionary principles.

We are aware that, in Tasmania, some telecommunication companies have been sending their own 'experts' to convince local government and community members that there is no health risk from base stations. I am concerned the industry's message and evidence selection is biased, as there is no conclusive evidence – the health concerns are still being researched and debated. We urge the Standing Committee to seek scientific advice from independent sources, other than ARPANSA, when members consider the potential health risks and why standards applied by other countries are much lower than in Australia. It is noteworthy that controversy surrounds some research with claims of bias and conflict of interest, where representation and funding are largely provided by the telecommunication industry – for example see:

http://www.magdahavas.com/2011/07/05/conflict-of-interest-the-wireless-industry-and-icnirp/

It appears that ARPANSA is waiting for scientifically proven (replicable) evidence of a causative link between EMR from telecommunication infrastructure and deleterious human health effects. At present uncertainty remains and ARPANSA will not apply a precautionary principal within the current Australian Standard for EMR exposure. The Australian community has lost confidence in ARPANSA. Please ensure the *Radiation Health and Safety Advisory Council* reviews the Australian Standard as detailed in the Bill.

Schedule 2 - Amend the 'Telecommunication Act 1997'

The *Telecommunications Act 1997* currently enables the installation of telecommunication towers and antennae through the use of permits and 'low-impact' classifications – which circumvents local or state government planning processes. In such instances the voluntary *Australian Communications Industry Forum* (ACIF) *Code* is used, and if public concerns are raised they are not, ultimately, enforceable by the Code.

The *Telecommunication Act 1997* made planning and regulation of 'high-impact' towers a state and local government matter. As a result, the ACIF Code doesn't apply to 'high impact' towers submitted through local government development application processes, such as occurred in Tinderbox, leaving residents with no avenue to lodge objections or concerns other than to the local council. In Tinderbox, our local council was not equipped to handle some of the concerns raised relating to provision of health information and lack of community consultation.

The proposed amendments to the Act should apply to both high and low impact telecommunication infrastructure. This will provide communities and individuals with an avenue for appeal when the industry breaches its code of conduct (as detailed in Items 11 & 12).

Apply precautionary principals when siting infrastructure

The Bill makes reference to the use of precautionary principals in the siting of telecommunication infrastructure (Items 15, 16, 17 & 19), and that maintenance of a facility should not result in increased EMR emission (Item 8). The Bill also requires definition of precautionary principals (Item 29) and its application (Item 28) in regards to risk to human health. We support the application of precautionary principles for the reasons detailed above in relation to lack of precautionary principles being applied by ARPANSA.

This Bill will introduce a 200 m buffer zone around sensitive sites (Items 16 &17), such as schools and hospitals. Children, elderly, and the ill are considered to be potentially the group most at risk from EMR exposure-related health effects. Perhaps the items should also consider homes as a sensitive site – often the very young and the elderly

spend the majority of the their time at home. In our case at Tinderbox, we do not feel that Telstra attempted to reduce EMR exposure to residents when they proposed the tower near our homes. The inferior coverage from the proposed tower site next to our home in meant that it would produce EMR at levels several times higher than an alternative site nearby that had already been approved, was not near homes, and provided better coverage (information sourced from the 'Radio Frequency National Site Archive' http://www.rfnsa.com.au/nsa/index.cgi website).

Please improve public consultation

Items 11, 12 & 13 would insure that residents within 500 m of a proposed telecommunication tower/antennae installation would be notified. In Tinderbox, only four neighbouring property owners were notified in writing by the local council of the development application to install the 34.5 m mobile phone tower, even though there were 20 other residential properties within 500 m of the proposed site. Many of the other properties not notified were exposed to the highest EMR emissions (exceeding the precautionary levels quoted above). The current public consultation through the local government development application is inadequate.

Install our right to access detailed and accurate health information

The Bill seeks to improve public consultation, access to health information, such as EMR exposure maps (Item 26). We sought health information from Telstra (namely, a Radio-Frequency (RF) EMR exposure map for houses within 500 m of the proposed tower site at Tinderbox), which Telstra was not going to provide until after the Council planning decision to consider the tower had been made. During the public comment period the only health information readily available to the public was the EMR exposure information accessible on AMTA's 'Radio Frequency National Site Archive' website and a hard copy at the Council Chambers; both sources had the wrong town name ('Margate') for the proposed tower at Tinderbox, which caused confusion and limited public access to this information. If the Tinderbox tower was a 'low impact' proposal this would had been a breach of the ACIF Code of Conduct, as Telstra was not able to provide timely provision of health information; however, as the proposed tower was 'high impact' the ACIF Code did not apply (and thus we had no avenue to voice our concern). Kingborough Council ultimately extended the assessment period of the Tinderbox development application by four weeks (due to the large number of community objections), and the extra time enabled us to access the health information from Telstra, but only through a personal meeting with the Telstra Southern General Manager. At this meeting we heard that Telstra had made a $3.3 billion profit in the last financial year and that they were not afraid to go to the planning tribunal if the Council decision was unfavorable. This is an unsatisfactory and an intimidating way for the community to have to access simple health information. The RF-map had less than 1/2 the maximum EMR exposure at ground level compared to Telstra's environmental report published on the RFNSA website. This raises a question regards the accuracy of information being made available to the public once the RF map was requested. Telstra also refused to provide us with a RF-map projecting the estimated radiation increase if other telecommunications carriers were to co-locate at the proposed Tinderbox site. The ACIF, Australian Communications and Media Authority (ACMA), and

Telecommunications Industry Ombudsman were unable to consider our concerns regarding the inadequate provision of the health information - because neither handles issues relating to 'high impact' towers. I doubt that any regulatory body, such as ACMA, even records the number of high-impact towers installed around the country that have raised community concerns.

Prevent tower height extension & EMR increases under the guise of 'maintenance'

Under the *Telecommunications Act 1997* it is possible for carriers to upgrade and make additions to existing installations (including those originally approved through local government development application processes) that would increase overall EMR output and visual impact (tower height). Such additions are installed under the definition of maintenance or 'low-impact'–and are thus exempt from local government and state planning (this was another fear of residents if the Tinderbox tower was built). Additions to the proposed tower in Tinderbox would have occurred without the need for assessment and public consultation, even though they would not have been part of the initial development application. The Bill aims to prevent 'maintenance', which is exempt from state and local planning, being used to increase the height of a tower (Item 7) or EMR emissions (Item 13) leaving the property where a tower is sited.

Make the industry provide a network plan to the local government

From a local government perspective, new tower approvals are actually approving 'new infrastructure' envelopes, often establishing a precedent for more infrastructure to be co-located on the approved site. It is important that wise decisions are made about the siting of infrastructure, which would be assisted through the provision of infrastructure network plans to ACMA and local governments (as in Item 30). The current installations appear ad hoc, and at times financially driven rather than optimizing the network coverage. This was demonstrated at Tinderbox, where a site with inferior coverage was proposed near homes. The Tinderbox community was frustrated and annoyed by the fact that Telstra already had a council approved site nearby that had already been through the development application process; the approved site was not near homes and provided superior coverage – but was subsequently deemed unacceptable to Telstra due to the cost to install power to the site. Such choices are not beneficial to the overall network or provision of telecommunications coverage to the community.

Summary

The Tinderbox mobile phone tower experience brought to our attention the autonomy that carriers have when it comes to siting mobile phone towers, the lack of say that residents have, and the disregard for precautionary principles even though the potential health risks from increased electromagnetic exposure are still being debated. We have learned that other communities nationwide have faced, and continue to face, similar issues. They feel the same sense of powerlessness and frustration that we experienced. We feel disenchanted with the current telecommunications legislation and have lost faith in lack of precautionary principles within the radiation exposure standard set by ARPANSA. The *Telecommunications Amendment (Mobile Phone Towers) Bill 2011* is not 'anti tower' – it will improve deployment practices and community consultation and ensure precautionary measures are applied.

Sincerely,
Dr Jason Whitehead & Dr Fiona Taylor

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