

11<sup>th</sup> March, 2012

Committee Secretary  
Senate Standing Committee on  
Environment and Communications  
Parliament House  
Canberra  
ACT 2600

Dear Sir/Madam,

Submission regarding the Telecommunications Amendment (Mobile Phone Towers) Bill 2011

As a member of the general public, I am concerned about the growing proliferation of sources of EMR in our environment. However, unlike with mobile phones and many other electronic devices, we, as the general public, have very little control of our exposure to the radiation from mobile phone towers.

For example, about two weeks ago, a new 4G phone tower was put up over a period of a couple of days opposite business premises and beside offices in Dubbo in New South Wales. No warning or advice of this was given to the surrounding community so I assume that it is a "low impact" tower that has been put up without the necessity of a DA or community consultation. No information has been given as to what levels of radiation the individuals working near this tower are being exposed to. Accurately assessing these levels requires buying a fairly expensive RF meter to measure the levels. If the levels are high, this will then also necessitate trying to take measures to provide some degree of shielding from the radiation, which is a very costly procedure. Current legislation disempowers us as community members. We have no legal rights regarding the location of towers. Surely this is a violation of very basic democratic rights and should be addressed by necessary legislation.

There is a growing body of scientific evidence that points to many health effects from the radiation from mobile phone towers. Please see references for a list of just some of these. Current standards concentrate on the thermal effects of EMR and assume fairly short periods of exposure. We can be subject to the radiation from phone towers for many hours each day and there is growing evidence to suggest that the effects are cumulative. It is also probably the resonance effect of the radiation rather than the thermal effect which disrupts the delicate electrical activity in the body leading to problems with the nervous system, learning and performance, sleep, immunity, various cancers and hormonal and reproductive problems. Current standards do not adequately protect the general public from these long term, cumulative exposures and need to be urgently reviewed. Some countries are already adopting much lower standards. Switzerland, for example, has introduced limits that reduce exposure to levels far below Australian levels. The standard there is 4microwatts/ sq cm while Australia's is 450 microwatts/ sq cm. Standards **should** be set that are much lower than those currently used as many scientific studies

are demonstrating adverse effects on the body at levels of exposure much lower than the ARPANSA standard.<sup>1</sup>

Thus, the government should provide adequate protection to the public through the setting of standards and the implementation of legislation. This is part of its duty of care to its citizens. It also has a duty of care to the environment and to the other species that share the environment with us, because these other species are not immune to the effects of EMR. Until totally conclusive evidence is available about the long term health effects of EMR from mobile phone towers, the precautionary principle should be applied and any changes to legislation should absolutely protect the public's health and safety. Legislation should also ensure public consultation and adequate public information about proposed sites for mobile phone towers and their probable effects on the general populace living or working near the towers. These basic rights should be safeguarded in any proposed amendments to the legislation.

Yours faithfully

Joy O'Farrell

Studies supporting adverse effects at low levels of radiation include:

- 0.2-8microwatts/sq cm – leukemia (Hocking, *Med J Aust*, 165 (11-12): 601-5,1996)
- c 7 microwatts/sq cm – increases in leukemia and lymphoma, (Szmigielski, *Sci Total Environ*, 180 (1):9-17, 1996)
- 1-2 microwatts/sq cm - cancer, chromosome & blood cell changes, miscarriages, nervous system effects (Goldsmith, *Int J Occup Environ Health* 1 (1):47-57,1995)
- c 0.5 microwatts/sq cm – increased rate of miscarriages (Ouellet-Hellstrom, *Am J Epidemiol* 138 (10):775-86, 1993)
- 0.2microwatts/sq cm – discomfort, irritability, appetite loss, fatigue, headache, difficulty concentrating, sleep disturbances (Navarro, *Biology and Medicine* 22 (2&3):161-9,2003)
- 0.0008-0.41 microwatts/sq cm – effects on memory, attention, reaction, endurance (Kolodynski, *Sci Total Environ* 180:87-93,1996)

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<sup>1</sup> BioInitiative Working Group, 'Bioinitiative Report', 2007, [www.bioinitiative.org](http://www.bioinitiative.org)