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The purpose of this PDF is to assist people wanting to learn about Barrister-at-Law Ray Broomhall's legal processes (the Broomhall Methods) he used to halt 4G/5G cell towers, small cell facilities and the like, whether about to be erected or already erected.

To educate you on the process Ray has used with success it is important that you ***MUST first watch BOTH part 1 and part 2 Ray's presentation*** on the 5G Summit.

*Part 1:*

<https://the5gsummit.com/expert/raymond-broomhall/>

*Part 2:*

<https://the5gsummit.com/expert/raymond-broomhall-2/>

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The following pages make up the ***STEPS TO PREPARE EVIDENCE FOR LITIGATION and POTENTIAL REMEDIES.***

**Please note: This document and associated documents is intended to be for educational purposes only and is not intended to be legal advice and you should not rely on them as such. It is highly recommended that you seek legal advice as to the procedures and law as discussed in this document, associated documents and/or video. The authors and publishers accept no responsibility whatsoever for any loss or liability incurred as a result of failing to follow the recommendation aforementioned.**

## **MAN MADE NON IONIZING ELECTROMAGNETIC RADIATION STEPS TO PREPARE EVIDENCE FOR LITIGATION and POTENTIAL REMEDIES**

1. Identify the source of non-ionizing electromagnetic radiation (EMR) emissions or proposed emissions- Is it a mobile phone base station, communications tower, 5G (4G)small cell, SMART meter, WiFi router, HAPS drone, Satellite or other device?
2. Identify the site where the emissions or proposed emissions will be irradiated upon - for example upon your home, workplace, school, hospital, retirement home, public transport etc.
3. Measure and record the distance between you and the EMR emission device and/ or facility.
4. Identify the emitter/proposed emitter, the installer, public relations, local council, and the land owner. Names of involved corporations and their respective ABN numbers, also include the names of directors of such corporations.
5. In Australia you can find your mobile communications tower on the RFNSA website at <https://www.rfnsa.com.au> – type in your suburb, identify the tower, click on it and retrieve the EME report and compliance certificate to find the emissions or proposed emissions in your area. You can find telecommunication licences for emitters using HAPS and satellites on the Australian Communication and Broadcasting Commission’s website.
6. Is it an existing installation? - If yes – most likely it has already been approved by council or in the alternative it did not require development approval – contact council to confirm.
7. Is it a proposed installation? - Does it require development approval? – contact council – if development approval is required ask council for the expiry date that any objection submissions are to be submitted by.
8. Sometimes the emitter or proposed emitter will advertise to the public requesting submissions inclusive of deadlines concerning their installation as part of an industry public consultation processes – verify whether their consultation process forms part of a legitimate council development application or not.
9. If the emitter/proposed emitter has been in contact with you via letter, notice etc collate all correspondence, including all correspondence you may have sent to the emitter also.
10. Obtain a medical opinion as to whether or not the EMR emissions or proposed emissions are or could pose a risk of harm to your health. If risk of harm to health is advised, then request that the medical practitioner advise on recommendations as to what needs to be done to remedy the situation. Examples of recommendations might be that you are not be exposed to EMR emissions from the tower or device etc, use cable instead of WiFi, turn routers off etc. To assist you may wish to provide your medical practitioner with a link to the Bio-initiative Report 2012 (updated 2017) - A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF) <https://bioinitiative.org/> and the following link to Physicians for Safe Technology – 5G Mobile Communications <https://mdsafe.org> . You could also ask your doctor to refer you to a specialist medical practitioner who consults EMR patients on a regular basis, and even better one who has appeared in either a court or tribunal on EMR issues. Your lawyer may also be able to refer you to a medical specialist if needed.  
Please note: Attached are 2 samples of medical opinions that may assist to educate your medical practitioner.
11. If the EMR emissions are from an existing installation - obtain witnesses who have mobile/cell or internet coverage. I.e. when they visit your home – do the witnesses have reception from their carrier? If yes, reception indicates that your home is being irradiated by their carrier. Witnesses can swear or affirm their testimony as evidence in an affidavit. See your lawyer for assistance on drafting an affidavit.
12. Contact a building biologist to conduct a report as to the level of EMR emissions in your home.
13. Obtains quotes for shielding purposes, such as shielding mesh, clothing, shielding paint etc to shield not only your person but also your house (inclusive of land). A building biologist should be able assist in this regard. (This will provide evidence to claim compensation for damage to property).
14. If you have the funds you could also obtain an independent radiation dosimetry report as to radiation levels emitted from the device or facility and SAR levels entering yours or your children’s body.
15. Collate all documents as mentioned above and forward copies of evidence to your lawyer/attorney.
16. Instruct your lawyer/attorney to draft an advice for you on their letterhead as to your legal position, legal options, legal remedies, chance of success and pitfalls etc, – the advice may include opinion as to remedy concerning laws that apply the precautionary principle. The precautionary principle is an integral component in State or Federal policy and is usually found embedded in the majority of State and Federal legislation. The precautionary principle as a rule should be actioned when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause-and-effect relationships are not fully established scientifically. Health risks associated with EMR though not fully established scientifically at present would still require precautionary measures to be taken by emitter and governmental decision makers.

17. Once you have a legal advice, send the said advice and the medical advice to your council and all parties such as the emitter, installers, land owners, inclusive of directors of the emitting companies involved. Attach a cover letter to your advices and call it an 'objection notice'. In the objection notice state that you 'do not consent to be irradiated with their EMR emissions and that you have established a reasonable belief and fear and/or apprehension that the emissions pose a risk of harm to health and a risk of damage to your property. Send by registered mail.
18. Lobby your councillors/aldermen. Send your objection notice to each councillor/aldermen within the council, try to meet with them to explain your situation.
19. Hopefully after receiving your objection notice, the emitters will tactfully withdraw from installing the facility and/or the council will issue an abatement notice against the emitters and/or reject any development application.
20. However, if the emitters and/or council decide not to heed your objection notice and make it known to you by a response letter to your objection and/or by their conduct (commence building and installing) that they intend to proceed with the installation or development then you may have various legal options available to you. If such an intention to proceed is made known to you and their intention to proceed caused you discomfort in the form of fear of harm and that they will irradiate you and your family, then such an action would constitute a threat to assault under section 75 of the Criminal Code Act 1889 (Queensland) for example.
21. The objection notice should provide the requisite evidence to enable you to apply various legal options and remedies. In the State of Queensland (Australia) for example some options and remedies include (but are not limited to);
  - I. **Civil-** abatement notices (environmental nuisance), personal injury claim (psychological injury), damage to property claim (home uninhabitable thus requires shielding), mandatory injunction (court order to force council to abate or prosecute the emitters).
  - II. **Quasi Criminal** - applying for Court ordered restraint orders (Peace and Good Behaviour Orders – also known in other States and Territories as Protection Orders and/or Apprehended Violence Orders, Keep the peace orders);
  - III. **Criminal** - prosecution of various criminal offences for trespass against the person such as;
    - **Assault** - Section 245 *Criminal Code 1899* (Qld) Section 245 provides the definition of assault and indicates that a person who strikes, touches or moves or "otherwise applies force of any kind" to the person of another, either directly or indirectly without the other persons consent or "threatens" to apply force of any kind to the person of another without the other persons consent under such circumstances that the person making the attempt or threat has actually or apparently a present ability to effect the person's purpose, is said to assault that other person and the act is called an assault. Please note that "applies force" includes the case of "applying heat and electrical force" or any other substance or thing whatever if applied in such a degree as to "cause injury" or "personal discomfort". Further note that to 'threaten' to apply force such as electrical force is considered unlawful and that it is not essential that a person threatened should be put in fear: an apprehension or expectation of assault is sufficient.
    - **Threatening violence** *Criminal Code 1899* (Qld) Section 75 provides that any person who with intent to intimidate or annoy any person, by words or conduct threatens to enter or damage a dwelling or other premises; or does any other act that is likely to cause any person in the vicinity to fear bodily harm to any person or damage to property; commits a crime. Maximum penalty—2 years imprisonment. If the offence is committed in the night the offender is liable to imprisonment for 5 years.
    - **Endangering life of children by exposure** - Section 326 *Criminal Code 1899* (Qld). Any person who exposes a child under the age of 7 years, whereby the life of such child is or is likely to be endangered, or the child's health is or is likely to be permanently injured, commits a crime. Maximum penalty—7 years imprisonment.
    - **Assault occasioning bodily harm** - Section 339 *Criminal Code 1899* (Qld). Any person who unlawfully assaults another and thereby does the other person bodily harm is guilty of a crime and is liable for imprisonment for 7 years but if the offender uses a dangerous or offensive instrument the offender is liable to imprisonment for 10 years. A dangerous or offensive instrument is anything that is capable of being used for offensive purposes even though it is also capable of being used for innocent purposes see *R v Sutton* (1887) 13 Cox CC 648. An assault causing any hysterical and nervous condition is an assault occasioning bodily harm see *R v Miller* [1954] 2 QB 282. Bodily injury occurs if 'pain' has lasted for a couple of days then the body has suffered damage as defined in *Brown v Blake* [2000] WASCA 132.
    - **Serious assault** - Section 340 *Criminal Code 1899* (Qld). Any person who commits an unlawful assault on a person who is sixty years of age or more and assaults any person who relies on a guide, hearing or assistance dog, wheelchair or other remedial device is guilty of a crime and liable to 7 years imprisonment.
    - **Negligent act causing harm** - Section 328 *Criminal Code 1899* (Qld). Any person who unlawfully does any act, or omits to do any act which it is the persons duty to do so, by which act or omission bodily harm is actually caused to any person is liable to imprisonment for 2 years and may be arrested without warrant.
    - **Duty of persons in charge of dangerous things** – Section 289 *Criminal Code 1899* (Qld). It is the duty of every person who has in the persons charge or under the person's control anything, whether living or inanimate, and whether moving or stationary, of such a nature that, in the absence of care or precaution in its use or management, the life, safety or health, of any person may be endangered, to use reasonable care and take reasonable precautions to avoid such danger, and the person is held to have caused any consequences which result in the life or health of any person by reason of any omission to perform that duty. It could be said that the substance or thing called EMR is a dangerous thing. The Carriers are in control of this dangerous thing and pursuant to 288 of the *Criminal Code 1889* they have a duty to control the said dangerous thing. **Duty of person doing dangerous acts** - Section 288 *Criminal Code 1899* (Qld) It is a duty of every person who, except in a case of necessity to do any lawful act which is or may be dangerous to human life or health, to have reasonable skill and to use reasonable care in doing

such act, and the person is held to have caused any consequences which result to the life or health of any person by reason of omission to observe or perform that duty.

- **Common nuisance** – section 230 *Criminal Code* 1899 (Qld) . Any person who without lawful justification or excuse, the proof of which lies on the person, does any act, or omits to do any act with respect to any property under the person's control, by which act or omission danger is caused to the lives, safety, or health, of the public; or without lawful justification or excuse, the proof of which lies on the person, does any act, or omits to do any act with respect to any property under the person's control, by which act or omission danger is caused to the property or comfort of the public, or the public are obstructed in the exercise or enjoyment of any right common to all Her Majesty's subjects, and by which injury is caused to the person of some person is liable to imprisonment for 2 years.

22. Commencing legal action can be a complicated process, it has many pitfalls and can be a costly exercise, especially if you do not win your case. It is highly recommended that you seek legal advice to clarify your options and position before you take any steps and/or proceed in a court of law.



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The following pages make up the ***Warning and Objection Notice***.

To:

Date:

Dear

## WARNING & OBJECTION NOTICE

**TAKE NOTICE** that the warnings and objection contained in this notice is intended not only to protect myself, my family and my property but it is intended to also protect you and to warn you of your duty of care and to warn you of the possible consequences that any of your actions or omissions in regards to the emission of any non-ionizing electromagnetic radiation onto my land from your facility and situated at that is either in your possession, charge and/or directly or indirectly under your control and/or under your management. That failure to heed this notice has the potential to place you in jeopardy of being both criminally and civilly liable for any actions or omissions that cause harm, injury and damage.

It is clear that you are proposing to place\* / have placed\* devices on a tower on a neighbouring property\* to my land with the intention to emit electromagnetic radiation onto my residential property without my consent. (\*Delete what is not applicable)

I do not consent to you contaminating my land with your emissions of non-ionizing electromagnetic radiation. If you irradiate my home without my consent you will be met with Court action in both the criminal and civil jurisdictions to remedy. I am of the firm belief that any electromagnetic radiation emitted from your facility that you either directly or indirectly possess and/or manage and/or control has the potential to expose my family to unnecessary and unreasonable risks of harm to health and safety. Your actions may also render my home uninhabitable to my family due to electromagnetic radiation contamination. I firmly believe that you have a duty to ensure that electromagnetic radiation does not pose such a risk.

I have the right to use and enjoy my land without interference from you. I put you on notice that various statutes and the common law protects my right to the use and enjoyment of my land without any interference from you my neighbour. If electromagnetic radiation is irradiated from your land onto my land and causes my family or I any discomfort, injury or damage to either our person or our property then it would constitute an interference with the rights connected to the land and as such would be classed as a nuisance under both criminal and civil law. A nuisance can be remedied by either criminal prosecution, restraint via civil action or both.

Please note that simply following the Safety Standard as set by the Federal Government will not protect you from civil or criminal liability if you knowingly and intentionally fail to adequately address my fears concerning the health and safety risk as raised by my medical practitioner. The legal onus is on you and squarely on YOU to assess and improve the safety and health impacts surrounding your activities.

**TAKE NOTE: IT WOULD BE A NEGLIGENT ACT IF YOU WERE TO EMIT ELECTROMAGNETIC RADIATION ONTO MY LAND AFTER HAVING BEEN GIVEN NOTICE OF THE WARNING AS CONTAINED WITHIN THIS NOTICE. ESPECIALLY AFTER YOU HAVE NOW BEEN INFORMED THAT SUCH AN ACTION COULD POSE RISK OF HARM. IF HARM DID EVENTUATE THE COURTS WOULD SEE THAT SUCH HARM IS REASONABLY FORESEEABLE, ESPECIALLY CONCERNING ANY PSYCHOLOGICAL HARM AGGRAVATED BY MY REASONABLE FEAR.**

Please find attached a medical advice from my medical practitioner outlining risk of harm to health and recommendations to mitigate such risk. The medical advice has contributed to the formation of my reasonable belief and fear that the emissions from the facility pose a real risk of harm to my family, myself and my property thus I am afraid of you and your intentions to emit. Also find attached a legal advice from my lawyer outlining the potential civil and criminal liability that could apply if you do not heed this notice and attached medical advice. I rely on both the legal and medical advice as attached.

**I DEMAND** that you discontinue any attempts by you or your agents to emit electromagnetic radiation upon my residence. I respectfully request that you inform me immediately of your decision as to whether or not you will proceed to emit electromagnetic radiation onto my residence. If you intend to disregard my fears, concerns and the medical advice and make it known to me by either letter or conduct that you will proceed regardless then I will treat such intentional conduct as an intentional threat to physically assault my family and myself with electromagnetic radiation.

Please note that if you fail to respond within 14 days from the date of this letter then it will be **deemed by your omission** to respond that you intend to irradiate my land. I will therefore have no choice but to seek remedy in a Court of law.

Yours sincerely,



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The following pages make up ***Sample 1 of the Medical Opinion document.***  
Personal details have been redacted for privacy reasons.



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**SAMPLE 1 - MEDICAL OPINION - REDACTED**

24/06/2018

TO WHOM IT MAY CONCERN

Re:  
DR [REDACTED] AND MS [REDACTED] AND FAMILY  
[REDACTED] NSW

It has come to my attention that a mobile phone company ([REDACTED]) proposes to erect new mobile phone small cell facility on an existing power pole No: SY [REDACTED] on road verge adjacent [REDACTED] Ave in [REDACTED] NSW. This home is the residence of Dr [REDACTED] and Ms [REDACTED] and their 3 children. The small cell radiofrequency (RF) emitting facility will be a mere 4 meters from main bedroom also 4 meters from their 17 year old son's bedroom. Their 14 year old son's bedroom is 6 meters away from the proposed telegraph pole where the antennae and both boys bedrooms are are upstairs at the same height as the antennae to be erected. Their 8 year old daughter's bedroom is 8 meters from the tower site.

Their [REDACTED] residence has recently been bought and extensively renovated and Dr [REDACTED] and Ms [REDACTED] and family intend to reside there for many years to come. [REDACTED], their 8 year old daughter plays in the garden with-in a few meters of the pole. In consultation with her parents, Dr [REDACTED] and Ms [REDACTED] are extremely anxious that the erection of this RF emitting device so close to where their daughter plays,

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[REDACTED]

may jeopardize her health. This is causing profound worry and emotional distress on the part of the parents for the safety of their daughter, their sons and themselves, with the proposed facility being so close to their family home.

In a study conducted measuring radiation from antenna sites in German residential areas in 2001-2002, at a distance of 250 meters from the base station, with direct line of site, the observed levels of radiofrequency power density was in the range of 200microwatts per meter squared (uW/m2). However, readings of over 100,000 uW/m2 were obtained. Greater than 25% of the recordings were over 1000mW/m2. These recordings were based on the then new digital 2G GSM system (Sierck 2015). It is likely that power density exposure in uW/m2 radiofrequency at 4-8 meters is going to be exponentially higher in the case of the Dr [REDACTED] and Ms [REDACTED] family.

In an environmental epidemiological study commissioned by the Provincial Government of Styria, Austria, in the municipalities of Hausmannstatten and Vasoldberg, of 2543 participants, within a range of 1200 meters from a emitting tower, persons living within a 200 meter radius of a mobile phone base station had a significantly increased of cancer of the breast and brain compared to those persons living 200-1200 meters from the tower. In comparison to the reference category of power density exposure of radiofrequency emissions less than 10uW/m2 where the odds ratio of risk of cancer was 1 (i.e. no increased risk), exposure levels between 100uW/m2 -1000uW/m2 increased the risk of all cancers to 3.4 times over the background population. The odds ratio for all cancers was 3.4 with the calculated probability or 'p value' of 0.008.

However, the cancer risk in the higher exposure range >1000uW/m2 was 23 times higher for breast cancer. The odds ratio being 22.5 and the calculated probability or 'p value' being 0.0007. The risk of brain tumours at >1000uW/m2 was 121 times higher with an OR of 121.1 (p value 0.001). (Oberfelt 2008).

Ms [REDACTED] has a family history of breast cancer. For Ms [REDACTED] to be living and sleeping 4 meters from an mobile phone base station emitting power density radiation in excess of 1000uW/m2 could increase the risk of her developing cancer.

According to the European Parliament Scientific and Technological Options Assessment (STOA) 2001 document 'The Physiological and Environmental Effects of Non-Ionising Electromagnetic Radiation' state that at locations where there is any long term exposure to radiofrequency, power densities should not exceed 10 nanoW/cm2 (100uW/m2)(STOA 2001).

However, the German Building Biology Institute –IBN (Institut fur Baubiologie + Okologie Neubeuern), recommends the safety limit of power density for bedrooms below 10uW/m2. Radiofrequency radiation power density between 10uW/m2 and 1000Uw/m2 is viewed with 'severe concern' and power densities in sleeping areas greater than 1000uW/m2 are viewed with 'extreme concern' (Maes 2008).

An international team of scientists as part of the BioInitiative Working Group, reviewed over 2000 research studies and in 2007 recommended that the safety limit for power density be 100-1000mW/m2. The 2012 recommendations from the Bioinitiative report are of power densities between 3-6uW/m2.

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[REDACTED]

The conclusions of the report state: "A scientific benchmark of 0.003 uW/cm<sup>2</sup> or three nanowatts per centimeter squared for 'lowest observed effect level' for RFR is based on mobile phone base station-level studies. Applying a ten-fold reduction to compensate for the lack of long-term exposure (to provide a safety buffer for chronic exposure, if needed) or for children as a sensitive subpopulation yields a 300 to 600 picowatts per square centimeter precautionary action level. This equates to a 0.3 nanowatts to 0.6 nanowatts per square centimeter as a reasonable, precautionary action level for chronic exposure to pulsed RFR" (Bioinitiative Report 2012).

In the 2012 Consensus Paper of the Austrian Medical Association Guidelines for the diagnosis and Treatment of EMF related health problems and illnesses, recommended that exposure to high frequency electromagnetic radiation as power flow density is that less than 1uW/m<sup>2</sup> is considered 'within normal limits'. 1-10uW/m<sup>2</sup> is 'slightly above normal limits'. 10-100uW/m<sup>2</sup> is considered 'far above normal'. Greater than or equal 1000uW/m<sup>2</sup> is considered 'very far above normal'. These recommendations apply to regular exposures of more than 4 hours a day (Austrian Medical Association Guidelines 2012).


In a another study in Germany of nearly 1,000 residents who had been residing at the same address during the entire observation period of 10 years, residents living within 400 meters of a cell tower base station, developed cancer three times more frequently than persons living further away and became ill on an average of eight years earlier.

Computer simulation and measurements used in the study both show that radiation in the inner area (within 400m) was 100 times higher compared to the outer area, mainly due to additional emissions coming from the secondary lobes of the transmitter.

In the first 5 years, there was no significant increased risk of getting cancer in the inner area. However, from 6-10 years of exposure to the radio-frequency (RF) EMF pollution, the odds ratio (OR) for getting cancer was 3.38 in the inner area compared to the outer area. Breast cancer was highest, with an average age of 50.8 year compared with 69.9 years in the outer area. Others cancers (prostate, pancreas, bowel, skin melanoma, lung and blood cancer) were all increased. (Eger H, et al. Umwelt-Medizin -Gesellschaft. 17;4 2004).

Similarly an Israeli study from Tel Aviv University, examined 622 people living within a radius of 350m (1148 feet) radius from a cell phone transmitter station for 3-7 years. Participants were very closely matched in environment, workplace and occupational characteristics against 1,222 control patients from nearby not exposed to RF EMF emissions. The researchers found an increased risk of cancer in women living in the near proximity (400m) of the cell phone transmitting station. Out of the 622 patients exposed to the RF emissions from the tower where power density was below 5000uW.m<sup>2</sup>, 8 cases of different kinds of cancer were diagnosed in a period of just one year:3 cases of breast cancer, one of ovarian cancer, lung cancer, Hodgkin's disease, osteoid osteoma and kidney cancer. This compares with 2 per 1 222 in the matched controls. The relative risk (RR) of cancer was 4.15 for those living near the cell-phone transmitter compared with the entire population of Israel. The significance value of this effect was very high ( $p < 0.0001$ ) suggesting that the likelihood of this effect happening by chance was less than 1/10000. (Wolf R, Wolf D. 2004).

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It should also not go unnoticed that there are potential neurological risks and neuropsychiatric risks which may develop when exposed to high radiofrequency. In a 2014 study of the health effects of living near a mobile phone base station antennaeThe results showed that most of the symptoms such as nausea, headache, dizziness, irritability, discomfort, nervousness, depression, sleep disturbance, memory loss and lowering of libido were statistically significant in the inhabitants living less than 300meters from the mobile phone base transceiver station BTS antenna (Shahbazi-Gahrouei D. 2014).

Dr Martha Herbert, a paediatric neurologist and neuroscientist on the faculty of the Harvard Medical School and on staff at the Massachusetts General Hospital, was asked to review literature pertinent to a potential link between Autism Spectrum disorder and electromagnetic frequencies and RF radiation. She produced a 60 page document with 550 citations and published in the Bioinitiative report 2012. A revised and shortened version appears in a peer reviewed indexed journal 'Pathophysiology' in two parts. Dr Herbert states that 'EMF can certainly contribute to degrading the physiological integrity of a system at a cellular and molecular level- and that this in term appears to contribute to the pathogenesis/causation not only of autism but many highly common illnesses including cancer, obesity, diabetes. She notes that there are thousands of papers documenting the adverse health and neurological impacts of EMF/RF and that children are more vulnerable than adults and children with chronic illnesses are even more vulnerable. Dr Herbert relates that current technologies were designed and promulgated without accounting for non-thermal biological impacts. She states:" The claim from WIFI proponents that the only concern is thermal impacts is now definitely outdated scientifically".

Dr Herbert's opinion is that radiofrequency EMF RFR from WIFI and cell tower as can exert a disorganizing ability to learn and remember, and can also destabilizing to the immune system and metabolic functions of the body (Herbert 2012).

I share Dr ██████'s and Ms ██████'s concern about the risk to their children being so closely exposed to EMF-RF emissions for prolonged periods of time and the wide spectrum of potential health risks from fatigue, headaches, nervousness, sleep disturbances to more sinister illnesses like autism and cancer.

The concerns of Dr ██████ and Ms ██████, in my professional opinion is justified and appropriate. They are both professionals, Dr ██████ being a urological surgeon and in possession of a Radiation User License (Radiation Control Act 1990 – issued by Environmental Protection Authority NSW). Dr ██████ is acutely aware of the harmful effects of RF thermal radiation for the ablation (incineration/destruction) of (cancerous) tissue, but also the co-lateral damage to healthy tissue. Both work with and are aware of the effects of medical radiation for diagnostic and treatment purposes. The radiation is targeted, all those in the immediate vicinity wear protective lead aprons and radiation monitors and exposure time is in seconds or less.

Ms ██████ is a radiation scientist and employed as a Radiation Safety Officer. She has post graduate studies in Magnetic Resonant Imaging (MRI). She works on a daily basis under the guidance of the EPA and ARPANSA using RF emitting devices in the diagnoses and treatment of of life threatening cancers. She is responsible for image guidance for RF ablations of tissue and nerves for pain management and cancer treatment and is acutely aware of the effect of RF waves/ pulses on tissue. Ms ██████ has witnessed the emotional impact of radiotherapy in its curative and destructive potential on patients and their families.

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Dr [REDACTED] and Ms [REDACTED] are fully aware from their extensive knowledge and experience working with with RF thermal and non-thermal radiation, that the potential risk from the base station is not of a thermal nature. The problem with a base station, is it is emitting radiofrequency 24 hours a day and the family will be exposed continuously in the same position while they sleep for 8-10 hours every night as well as intermittent exposure through the day. Their daughter [REDACTED], will have additional direct exposure while playing in the garden immediately next to the base station just a few meters away.

As in the case of McDonald vs Comcare 2013, here in Australia, the judge awarded in favour of Dr McDonald: "on the balance of probabilities that Dr McDonald has suffered either an aggravation of his sensitivity to EMF; or an aggravation of his symptoms by reason of his honest belief that he suffers from the condition of EMF sensitivity and that his exposure to EMF associated with the trials has worsened his sensitivity." (Administrative Appeals Tribunal of Australia)  
[www.austlii.edu.au/au/cases/cth/aat/2013/105.html](http://www.austlii.edu.au/au/cases/cth/aat/2013/105.html)

Like Dr McDonald, it is my impression that should Dr [REDACTED] and Ms [REDACTED] feel the physical, intellectual and emotional health of their children or themselves has become affected by exposure to base station 'small cell facility' radiofrequency emissions, which, due to the immediate proximity to their place of residence is likely to be substantial, they will likely they will seek legal opinion to to minimize their family's health risk.

Already Dr [REDACTED] and Ms [REDACTED] are experiencing considerable angst and emotional disease, knowing that work has commenced to connect the base station to the power pole. Should it transpire that this healthy family develop physical or mental illness as a result of placing a base station immediately adjacent to their place of residence, especially with a 'groundswell' of research noting the health hazards of high power density radiofrequency radiation for long periods of time, beyond 4 hours a day and having received this letter, then Dr [REDACTED] and Ms [REDACTED] will seek legal opinion. I strongly recommend that the base station be moved away from their principle residence to at least beyond 500meters from their residence to minimize their exposure to potential widespread risks or physical or mental ill health.

To counter this strong recommendation to place the base station elsewhere at least 500 meters away, with the argument that the telephone company is following due process being within the ARPANSA Radiation Protection Standard of 2002, may not be a sufficient buffer. As stated in the The Austrian Medical Association Guidelines for the diagnosis and treatment of EMF related health problems and illnesses (EMF syndrome) Consensus paper of the Austrian Medical Association's EMF Working Group (AG-EMF), the recommendations of the WHO, compiled by the International Commission on Non-Ionizing Radiation Protection (ICNIRP 1998), are based on a thermal model. These recommendations were adopted by the EU in its Council Recommendation of 1999. The ICIRP does not discuss potential risks of exposure to non-thermal radiation. In recognition of the non-thermal risk of exposure to electromagnetic fields, a report entitled ""The potential dangers of electromagnetic fields and their effect on the environment"" was adopted by the Parliamentary Assembly of the Council of Europe in 2011. This report highlights the risk of head tumours in children and young people when exposed to high frequency electromagnetic fields and a number of measures to protect humans and the environment,

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[REDACTED]

especially from high-frequency electromagnetic fields. One of the recommendations is to “take all reasonable measures to reduce exposure to electromagnetic fields, especially to radio frequencies from mobile phones”. Special mention is made of protecting children (Austrian Medical Association Guidelines 2012).

In a study published in the international Journal of Occupational and Environmental Health, the authors found 8 out of 10 epidemiological studies reported adverse neuro-behavioural symptoms or cancer in populations living less than 500 meters from a base station. The authors state: “None of the studies reported exposure above internationally accepted guidelines, suggesting that current guidelines may be inadequate in protecting the health of human populations. We believe that comprehensive epidemiological studies of long term mobile phone base station exposure are urgently required to more definitively understand its health impact” (Vini 2010).

The EUROPAEM EMF Guideline 2015 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses, recognize that the so-called non-thermal effects and potential long-term effects of low-dose exposure, were scarcely investigated prior to the introduction of these EMF generating technologies like Wi-Fi access points, routers and clients, cordless and mobile phones including their base stations, Bluetooth devices, ELF magnetic fields from net currents, ELF electric fields from electric lamps and wiring close to the bed and office desk. The authors state that there is strong evidence that long-term-exposure to certain EMF exposures is a risk factor for diseases such as certain cancers, Alzheimer's disease and male infertility. Also the emerging syndrome of heightened sensitivity to electromagnetic fields ‘electromagnetic hypersensitivity (EHS)’, is more and more recognized by health authorities, disability administrators and case workers, politicians, as well as courts of law according to the authors (Belyaev 2015).

In conclusion, it is my professional opinion, that placing the proposed mobile phone small cell facility on the power pole No: SY [REDACTED] on road verge adjacent to [REDACTED] Ave in [REDACTED] NSW, places the family of Dr [REDACTED] and his partner Ms [REDACTED] and their 3 children at risk of an array of health hazards due to the immediate proximity of the EMF RF emitting device. The fact that their bedrooms are mere meters from the device, means they will sustain prolonged exposure repeatedly, which could further aggravate any potential health risk. I strongly recommend that the proposed location of the base station (small cell facility) be moved at least 500 meters away from this family to minimize potential health risks.

Should you wish to discuss the matter further, please contact me at the address below.

Yours sincerely

[REDACTED]

Dr [REDACTED]

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[REDACTED]

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*[the5gsummit.com](http://the5gsummit.com)*

**The 5G Summit does not provide support for these documents.**

**For all questions and support, please go to [emrlegaleducation.com/5gsummit](http://emrlegaleducation.com/5gsummit)**

The following pages make up ***Sample 2 of the Medical Opinion document.***  
Personal details have been redacted for privacy reasons.

**RAYMOND J. BROOMHALL**  
**BARRISTER**

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**SAMPLE 2 MEDICAL OPINION – REDACTED**

██████████  
██████████  
██████████  
Dear Mrs ██████████

You have sought my professional opinion as to whether exposure from electromagnetic radiation emissions from a proposed RF facility on your street adjacent to your house, could pose a health risk to you and your family. Your biggest concern is that of your children.

You state that you are becoming more anxious every day due to your fear that you are concerned the immediate proximity of the proposed small cell facility 4G mobile phone base station.

You informed me that ██████████ on behalf of ██████████ are planning to erect a 4G LTE 700 wireless base station at existing utility pole # ██████████ within road verge, adjacent to ██████████ Road, ██████████ NSW ██████████ as per the environmental EME Report RFNSA No: ██████████

You are particularly concerned that you, your husband and your children will be living and sleeping in constant electromagnetic radiation from wireless base station emissions mounted on the street pole outside your house a mere 20 meters from your bed in direct view of the pole. Having reviewed the architectural drawings of your

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property, the children's bedroom are a maximum of 40 meters from the pole, as are the living areas.

You advise that you and your family intend to live in your home for many years to come and are experiencing extreme anxiety and emotional distress which you feel is due to the impending erection of an RF emitting device so close to where you and your family live. You are concerned that the extreme close proximity to the wireless base station, may jeopardize the health of your daughters especially and the rest of your family as well.

In the Environmental EME (electromagnetic energy) Report provided by [REDACTED] dated 02-02-2019 RFNSA Site No [REDACTED], Environmental EME report (v12.2 Feb 2019) produced with RF-Map 2.1 (Build 1.0) NAD (v1.0.98867.32214) page one of that report states: "The maximum EME level calculated for the proposed systems at this site is 1.31V/m; and a power density of 4.55mW/m<sup>2</sup> or 0.12 % of the public exposure limit". 4.55mW/m<sup>2</sup> (4.55 milliwatts/m<sup>2</sup>) is 4550uW/m<sup>2</sup> or 4550microwatts/m<sup>2</sup> since a milliwatt is thousand microwatts. Page 2 of the EME Report states that the maximum EME is 0-50meters from the source. This area covers your whole house and even your back entertainment and relaxation area is within the highest radiation emission zone of the proposed wireless base station to be erected on an existing utility pole # [REDACTED] on the road verge outside your house at [REDACTED].

What does this all mean? ARPANSA is the Australian Radiation Protection and Nuclear Safety Agency. In the ARPANSA Radiation Protection Series 3 Publication, it states that 10W/m<sup>2</sup> (ten watts per meter squared) which equates to 10 million microwatts/m<sup>2</sup>, is the public exposure limit. This limit is based on the risk of ionizing or thermal radiation. i.e. the point at which a person suffers radiation burns, similar to the radiation burns of radiotherapy for cancer sufferers.

The ARPANSA standard quite rightly protects the Australian public from radiation burns which occurs beyond the scope of the Standard. The Standard covers frequency range of 3kHz to 300GHz. This is radiofrequency electromagnetic energy (RF-EME) also commonly known as radiofrequency electromagnetic fields (RF-EMF) or in the US as electromagnetic fields- radiofrequency radiation (EMF-RFR).

However, there is no obvious protection offered or described within in the Standard from non-ionising radiation which occurs below 10million microwatts per meter squared. I am not aware of any prospective research validating the safety of round the clock exposure to RF-EME for indefinite number of years/decades. Further, more, since your family will be maximally exposed to field strengths of up to 1.3V/M (volts per meter) and power densities of up to 4550microwatts/m<sup>2</sup> for prolonged periods of time for years to decades. There is no research in the literature proving safety from non-ionising radiation harm over extended periods of time.

However, the public is assured in the ARPANSA 2017 Technical report 178 Executive Summary:

'There is currently no established evidence that exposure to radiofrequency (RF) electromagnetic energy (EME) at levels below the safety limits of the Australian RF Standard causes any health effects.'

This reads that any person of any age can live in the vicinity of RF-EME for any length of time exposure. as long as the power density is below 10 million microwatts per meter squared. No distinction of age or distance or length of time exposed is made and whether the same standard which is tested on an adult model is applicable to a child.

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Yet on page ii of the 'Forward' of the Standard it states: "The Standard has been specifically devised to protect everybody, including children".

However, the ARPANSA 2017 Technical report 178 Executive Summary which was published 15 years after the Standard of 2002 admits: 'The 2010 WHO Research Agenda identified a lack of sufficient evidence relating to children and this is still the case. The WHO Agenda recommended a prospective cohort study to investigate whether the use of mobile phones and other RF sources by children and adolescents is associated with long-term health effects including cancer and developmental, cognitive and behavioural disorders. Given that no long-term prospective study has looked at this issue to date this research need remains a high priority.'

Understanding this document, means that for the last 15 years to 2017 and now up to the present in 2019, there has been no research forthcoming and yet we are led to believe that the standard protects everybody including children.

Where it is encouraging to note the research on children is 'in the pipeline', it appears that there is no definite research that has been completed attesting to the safety of RF-EME for our most precious members of our society, being our children. This then undermines the projected 'safety' portrayed by the Standard. As a medical professional, it gives me no confidence at all, that children living in the vicinity of a small cell facility (mobile phone base station), are protected when no short term or long term research has proved safety from harm up to 10 million uW/m<sup>2</sup>.

As a parent and concerned citizen, one would have every right to be aghast at the recognition of this information, that small cell facilities are being erected promiscuously throughout cities and suburbs Australia-wide, without proven long term research of the safety of such devices for adults and especially children exposed continuously 24 hours a day.

Closer inspection of the Standard reveals on page 9 that the time averaged power flux density (W/m<sup>2</sup>) states: 'For determination of time averaged values at frequencies below 10 GHz, an averaging time of six minutes applies'.

No data is forthcoming of human exposure to 24 hours, 365 days a year for multiple years RF-EME in the case of residents (your family) within 50 meters of the proposed wireless base station will be exposed to power densities of up to of 4550uW/m<sup>2</sup>.

Furthermore, there is no advice forthcoming from ARPANSA, as to any potential risks to babies, children, or pregnant mothers with regard to proximity to RF-EMR emitting devices or length of exposure. The inference from the lack of any qualifying advice from ARPANSA, infers that permanent exposure (24 hours a day, 7 days a week) even having RF-EMR devices in contact with one's body or head is 'safe'.

The following studies I have selected, provide evidence to support my opinion. The studies below should give you a greater insight as to the risks associated with exposure to radiofrequency electromagnetic energy radiation.

In an environmental epidemiological study commissioned by the Provincial Government of Styria, Austria, in the municipalities of Hausmannstatten and Vasoldberg, of 2543 participants, within a range of 1200 meters from a

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emitting tower, persons living within a 200 meter radius of a mobile phone base station had significantly increased incidents of cancer of the breast and brain compared to those persons living 200-1200 meters from the tower. In comparison to the reference category of power density exposure of radiofrequency emissions less than 10uW/m<sup>2</sup> where the odds ratio of risk of cancer was 1 (i.e. no increased risk), exposure levels between 100uW/m<sup>2</sup> -1000uW/m<sup>2</sup> increased the risk of all cancers to 3.4 times over the background population. The odds ratio for all cancers was 3.4 with the calculated probability or 'p value' of 0.008.

However, the cancer risk in the higher exposure range >1000uW/m<sup>2</sup> was 23 times higher for breast cancer. The odds ratio being 22.5 and the calculated probability or 'p value' being 0.0007. The risk of brain tumours at >1000uW/m<sup>2</sup> was 121 times higher with an OR of 121.1 (p value 0.001). (Oberfeld 2008).

You are concerned if living so close to a small cell facility could increase to risk of cancer especially brain cancer in members of your family. The research paper above commissioned by the Austrian Provincial Government of Styria, elucidates that persons without tumours are exposed a 121 fold increase risk of developing brain tumours and a 22.5 times increase risk of breast tumours. There was also a 5-8 fold increased risk for all other tumours.

What was also of most concern about this research, was that cancers occurred in a relatively short period of exposure, a minimum of 5 years.

In my opinion such close exposure could increase the risk of cancer as elucidated by the above research. What adds an extraordinary level of concern, is that the data in the above research is based on readings greater than 1000uW/m<sup>2</sup>. The projected reading of 4550uW/m<sup>2</sup> at 0-50 meters from the proposed antenna, which is a power density reading more than 4.5 times higher than the already increased risk of breast cancer and brain cancer in the Oberfeld research. This would place you and your family in an extreme risk for developing cancer in my opinion.

The highest risk as per the above study is for brain cancer, through the impending environmental impact of close range continuous RF emissions exposure for prolonged periods of time. In fact, the risks for your children is higher, as children absorb more electromagnetic radiation than adults. In a study comparing specific absorption rates (SAR) in children and adults exposed to 1800MHz mobile phones, children absorbed 80% more radiation than adults. The research is based on brain modelling of a 10 year old (Fernandez 2005). Your concerns, in my professional opinion are justified and appropriate.

According to the European Parliament Scientific and Technological Options Assessment (STOA) 2001 document 'The Physiological and Environmental Effects of Non-Ionising Electromagnetic Radiation' state that at locations where there is any long term exposure to radiofrequency, power densities should not exceed 10 nanoW/cm<sup>2</sup> (which is 100uW/m<sup>2</sup>) (STOA 2001).

The projected RF-EME in power density from the proposed small cell base station outside your house at [REDACTED] will be 45 times higher than the recommended safety limit proposed by the European Parliament as cited above.

However, the German Building Biology Institute –IBN (Institut für Baubiologie + Ökologie Neubeuern), recommends the safety limit of power density for bedrooms below 10uW/m<sup>2</sup>. Radiofrequency radiation power density between 10uW/m<sup>2</sup> and 1000Uw/m<sup>2</sup> is viewed with 'severe concern' and power densities in sleeping areas greater than 1000uW/m<sup>2</sup> are viewed with 'extreme concern' (Maes 2008).

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An international team of scientists as part of the BioInitiative Working Group, reviewed over 2000 research studies in 2007 and again in 2012 and recommended that the safety limit for power density be 0.3-0.6uW/m<sup>2</sup> as this was the lowest observed level for RF-EME based on mobile phone base stations.

The conclusions of the report state: "A scientific benchmark of 0.003 uW/cm<sup>2</sup>" or three nanowatts per centimeter squared (equal to 0.3uW/m<sup>2</sup>) for 'lowest observed effect level' for RFR is based on mobile phone base station-level studies. Applying a ten-fold reduction to compensate for the lack of long-term exposure (to provide a safety buffer for chronic exposure, if needed) or for children as a sensitive subpopulation yields a 300 to 600 picowatts per square centimeter precautionary action level. This equates to a 0.3 nanowatts to 0.6 nanowatts per square centimeter (0.03uW/m<sup>2</sup>) as a reasonable, precautionary action level for chronic exposure to pulsed RFR" (Bioinitiative Report 2012).

In spite of RF-EME equipment working within the ARPANSA Standard exposure being under power densities of 10W/m<sup>2</sup> or 10million microwatts/m<sup>2</sup>, it is my opinion that you are not protected by the very Standard that is designed to protect all Australian citizens and is considered to have no harmful effects on health.

As can be seen from the BioInitiative Report, benchmark safety for adults is considered 0.3uW/m<sup>2</sup> and children 0.03uW/m<sup>2</sup>. Hence your exposure being in your house with predicted levels 20 meters away from the tower at 4550uW/m<sup>2</sup> is 15,166 times higher (more than fifteen thousand higher) than considered safe according to specialist doctors and research scientists who comprise the BioInitiative Group who are the authors of thousands of research papers in the BioInitiative Report which is independently funded.

The Austrian Medical Association in their document 'Guidelines for the diagnosis and treatment of EMF-related health problems and illnesses (EMF Syndrome) Consensus paper of the Austrian Medical Association's EMF Working Group (AG-EMF)', has recommended preliminary benchmarks. It states is irrespective of the ICNIRP recommendations for acute effects (upon which the ARPANSA Standard is based). The bench marks apply to regular exposure of more than four hours a day to electromagnetic radiation as power flow density is that less than 1uW/m<sup>2</sup> is considered 'within normal limits'. 1-10uW/m<sup>2</sup> is 'slightly above normal limits'. 10-100uW/m<sup>2</sup> is considered 'far above normal'. Greater than or equal 1000uW/m<sup>2</sup> is considered 'very far above normal'(Austrian Medical Association Guidelines 2012).

In another study in Germany of nearly 1,000 residents who had been residing at the same address during the entire observation period of 10 years, residents living within 400 meters of a cell tower base station, developed cancer three times more frequently than persons living further away and became ill on an average of eight years earlier.

Computer simulation and measurements used in the study both show that radiation in the inner area (within 400m) was 100 times higher compared to the outer area, mainly due to additional emissions coming from the secondary lobes of the transmitter.

In the first 5 years, there was no significant increased risk of getting cancer in the inner area. However, from 6-10 years of exposure to the radio-frequency (RF) EMF pollution, the odds ratio (OR) for getting cancer was 3.38 in the inner area compared to the outer area. Breast cancer was highest, with an average age of 50.8 year compared with 69.9 years in the outer area. Others cancers (prostate, pancreas, bowel, skin melanoma, lung

and blood cancer) were all increased. (Eger H, et al. Umwelt-Medizin -Gesellschaft. 17;4 2004).

Similarly, an Israeli study from Tel Aviv University, examined 622 people living within a radius of 350m (1148 feet) radius from a cell phone transmitter station for 3-7 years. Participants were very closely matched in environment, workplace and occupational characteristics against 1,222 control patients from nearby not exposed to RF EMF emissions. The researchers found an increased risk of cancer in women living in the near proximity (400m) of the cell phone transmitting station. Out of the 622 patients exposed to the RF emissions from the tower where power density was below 5000uW/m<sup>2</sup>, 8 cases of different kinds of cancer were diagnosed in a period of just one year: 3 cases of breast cancer, one of ovarian cancer, lung cancer, Hodgkin's disease, osteoid osteoma and kidney cancer. This compares with 2 per 1 222 in the matched controls. The relative risk (RR) of cancer was 4.15 for those living near the cell-phone transmitter compared with the entire population of Israel. The significance value of this effect was very high ( $p < 0.0001$ ) suggesting that the likelihood of this effect happening by chance was less than 1/10000. (Wolf R, Wolf D. 2004).

It should also not go unnoticed that there are potential neurological risks and neuropsychiatric risks which may develop when exposed to high radiofrequency. In a 2014 study of the health effects of living near a mobile phone base station antennae. The results showed that most of the symptoms such as nausea, headache, dizziness, irritability, discomfort, nervousness, depression, sleep disturbance, memory loss and lowering of libido were statistically significant in the inhabitants living less than 300 meters from the mobile phone base transceiver station BTS antenna (Shahbazi-Gahrouei D. 2014).

Dr Martha Herbert, a paediatric neurologist and neuroscientist on the faculty of the Harvard Medical School and on staff at the Massachusetts General Hospital, was asked to review literature pertinent to a potential link between Autism Spectrum disorder and electromagnetic frequencies and RF radiation. She produced a 60 page document with 550 citations and published in the Bioinitiative report 2012. A revised and shortened version appears in a peer reviewed indexed journal 'Pathophysiology' in two parts. Dr Herbert states that 'EMF can certainly contribute to degrading the physiological integrity of a system at a cellular and molecular level- and that this in term appears to contribute to the pathogenesis/causation not only of autism but many highly common illnesses including cancer, obesity, diabetes. She notes that there are thousands of papers documenting the adverse health and neurological impacts of EMF/RFR and that children are more vulnerable than adults and children with chronic illnesses are even more vulnerable. Dr Herbert relates that current technologies were designed and promulgated without accounting for non-thermal biological impacts. She states:" The claim from WIFI proponents that the only concern is thermal impacts is now definitely outdated scientifically".

Dr Herbert's opinion is that radiofrequency EMF RFR from WIFI and cell tower as can exert a disorganizing ability to learn and remember, and can also destabilizing to the immune system and metabolic functions of the body (Herbert 2012).

The Austrian Medical Association Guidelines for the diagnosis and treatment of EMF related health problems and illnesses (EMF syndrome) Consensus paper of the Austrian Medical Association's EMF Working Group (AG-EMF), states that the recommendations of the WHO, compiled by the International Commission on Non-Ionizing Radiation Protection (ICNIRP 1998), are based on a thermal model. These recommendations were adopted by the EU in its Council Recommendation of 1999. The ICNIRP does not discuss potential risks of exposure to non-thermal radiation. In recognition of the non-thermal risk of exposure to electromagnetic fields, a report entitled "The potential dangers of electromagnetic fields and their effect on the environment" was adopted by the

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Parliamentary Assembly of the Council of Europe in 2011. This report highlights the risk of head tumours in children and young people when exposed to high frequency electromagnetic fields and a number of measures to protect humans and the environment, especially from high-frequency electromagnetic fields. One of the recommendations is to “take all reasonable measures to reduce exposure to electromagnetic fields, especially to radio frequencies from mobile phones”. Special mention is made of protecting children (Austrian Medical Association Guidelines 2012).

In a study published in the international Journal of Occupational and Environmental Health, the authors found 8 out of 10 epidemiological studies reported a higher incidence of cancer and adverse neuro-behavioural symptoms in populations living less than 500 meters from a base station.

The authors state: “None of the studies reported exposure above internationally accepted guidelines, suggesting that current guidelines may be inadequate in protecting the health of human populations. We believe that comprehensive epidemiological studies of long term mobile phone base station exposure are urgently required to more definitively understand its health impact” (Vini 2010).

The EUROPAEM EMF Guideline 2015 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses, recognize that the so-called non-thermal effects and potential long-term effects of low-dose exposure, were scarcely investigated prior to the introduction of these EMF generating technologies like Wi-Fi access points, routers and clients, cordless and mobile phones including their base stations, Bluetooth devices, ELF magnetic fields from net currents, ELF electric fields from electric lamps and wiring close to the bed and office desk. The authors state that there is strong evidence that long-term-exposure to certain EMF exposures is a risk factor for diseases such as certain cancers, Alzheimer's disease and male infertility. Also the emerging syndrome of heightened sensitivity to electromagnetic fields ‘electromagnetic hypersensitivity (EHS)’, is more and more recognized by health authorities, disability administrators and case workers, politicians, as well as courts of law according to the authors (Belyaev 2015).

In conclusion, it is my professional opinion, that placing the proposed wireless base station which is in fact a powerful mobile phone with the power of a mobile phone tower antenna small cell facility on existing utility pole # [REDACTED] within road verge, adjacent to [REDACTED] Road, [REDACTED] which is a mere few meters from the front of your home, places you and your family at risk of an array of health hazards due to the immediate proximity of the RF-EME radiation emitting device and the highest power densities and field strengths as per the Environmental EME (electromagnetic energy) Report provided by [REDACTED] dated [REDACTED] RFNSA Site No. [REDACTED], will be inside your house.

The fact that the main bedroom is a mere 20meters from the proposed wireless base station, and the children’s bedrooms within 40 meters, means you and your husband and children will sustain prolonged exposure repeatedly. I strongly recommend that the proposed location of the wireless base station (small cell facility) be moved beyond 500 meters away from your residence to minimize potential health risks to your family of cancer, fatigue, headaches, nervousness, cognitive problems and sleep disturbances.

Since there are a surprising number of research studies detecting a higher risk of brain cancer (and other cancers) living close to a wireless base station, it is my professional opinion, that this places your family at risk.

Following the Precautionary Principle, I most strongly recommend that the proposed small cell facility be moved to another site at least 500 meters or more away from your house.

The benchmark of safety from RF-EME exposure is 0.3uW/m<sup>2</sup> according to the BioInitiative report as stated



above and for the sake of our more vulnerable children adopting 'The Precautionary principle of a further 10 times reduction being 0.03uW/m<sup>2</sup>. The Austrian Medical Association considers <1uW/m<sup>2</sup> normal and 1-10 'slightly above normal' and >1000uW/m<sup>2</sup> 'very far above normal' as stated above. I am not sure what adjective describes 4550uW/m<sup>2</sup>, but in my opinion it is exponentially and dangerously above normal. Even 200m from the antennae in the [REDACTED] EME document states from the proposed equipment is 1,051mW/m<sup>2</sup> which is 1,051microWatts/m<sup>2</sup> (1551uW/m<sup>2</sup>), which is way above the proposed safety standards of the STOA, the Austrian Medical Association, The German Building Biologists and the BioInitiative Group. Hence even 200 meters away from this equipment place your family at significant risk.

I would not recommend that you and your family as residents of [REDACTED], adjacent to the existing pole # [REDACTED], whilst residing in your residence be exposed to radiofrequency 24 hours a day from the proposed wireless base station nor that you are exposed continuously while you sleep for 8-10 hours every night.

In my opinion the ARPANSA Radiation Protection Standard of 2002 guidelines do not provide a sufficient buffer as to exposure to EMR in your situation. In fact, the Standard states that some people are sensitive to EMR exposure and that they may suffer from ill health accordingly. In May 2011, a group of experts at the International Agency for Research on Cancer, an agency of the WHO, classified radiofrequency electromagnetic fields as possibly carcinogenic (Group 2B) for humans (IARC 2011).

In 2018, the Ramazzini Institute published the largest long term study of rats exposed to radiofrequency from pre-term to death. There was a statistically significant increased risk of malignant schwannomas of the heart. There was also an increased incidence of glial tumours (malignant brain tuours) in female rats but it was not statistically significant. The authors commented 'These tumors are of the same histotype of those observed in some epidemiological studies on cell phone users. These experimental studies provide sufficient evidence to call for the re-evaluation of IARC conclusions regarding the carcinogenic potential of RFR in humans' (Falcioni 2018).

A recent 2019 publication by Professor Hardell and colleague of Sweden author of multiple research papers on the risk of mobile phones and brain cancer in 2019, commented on the Ramazzini Institute and the NTP 10 year study both completed in 2018, that 'We conclude that there is clear evidence RF radiation is a human carcinogen, causing glioma and vestibular schwannoma (acoustic neuroma). There is some evidence of an increased risk of developing thyroid cancer, and clear evidence that RF radiation is a multi-site carcinogen. Based on the Preamble to the IARC Monographs, RF radiation should be classified as carcinogenic to humans, Group 1' (Hardell 2019).

The NTP study which was completed and peer reviewed in March of 2018 demonstrated an increase in malignant heart schwannomas, brain malignant gliomas of the brain and pheochromocytoma tumours of the adrenal glands. There was also an increase in lung tumours, pituitary tumours, liver tumours and prostate tumours but these were not statistically significant. Furthermore, damage to the heart (cardiomyopathy) similar to ageing was detected. The rats also sustained higher DNA damage and had adverse peri-natal events (ntp.gov2018).

Other authors have also recently published on the utility of the NTP Study for assessing human health risk. Melnick comments that in spite of unfounded criticisms aimed at minimising the findings of adverse health effects, In contrast to those criticisms, an expert peer-review panel recently concluded that the NTP studies were well designed, and that the results demonstrated that both GSM- and CDMA-

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modulated RFR were carcinogenic to the heart (schwannomas) and brain (gliomas) of male rats (Melnick 2019).

Miller and colleagues also in 2018, comment that 9 case control studies reveal evidence of malignant gliomas and non-malignant vestibular schwannomas (acoustic neuromas) and meningiomas in relation to RF-EMR exposure. The authors also endorse the view that 'when considered with recent animal experimental evidence, the recent epidemiological studies strengthen and support the conclusion that RFR should be categorized as carcinogenic to humans (IARC Group 1) (Miller et al 2018).

Hence the evidence is mounting that exposure to RF-EMR should not be discounted as insignificant. On the contrary, is indicating higher risk of dangerous and life threatening cancers.

In the Forward of the Standard it states: 'It is recognised that the Standard does not operate in isolation from the legal framework within Australia. Relevant Australian occupational, health, safety, and environment laws provide obligation on employers, and the designers, manufacturers and suppliers of plant or equipment, to ensure that their activities, or their plant and equipment, do not represent a risk to the health and safety of their employees or third parties who may be affected by them. In effect, such laws require relevant parties to continually assess and improve the safety and health impact of their activities. '(ARPANSA Standard Publication No.3).

In line with the above it is incumbent upon the purveyors of RF-EME technology and equipment and activation of such RF-EME systems, in your case [REDACTED], and the carrier [REDACTED], to ensure the proposed LTE 700 small cell facility planned for the street pole when operational does not represent a risk to the health and safety of third parties (residents) who may be affected by them.

My conclusion is that you and your family, the resident's in very close proximity of the proposed wireless mobile base station proposed to be erected adjacent to [REDACTED], are at extreme risk of harm to your health due to the immediate proximity to the proposed base station to your residence.

Should you wish to discuss the matter further, please contact me at the address below.

Yours sincerely

Dr [REDACTED]

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