

ET Docket No. 13-84

February 3, 2014 **ECFS**

Federal Communications Commission

Washington, D.C. 20554

RE: Final Reply to Comments Regarding Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies, Proceeding 13-84

To whom it may concern:

Again, thank you for taking late comments and replies to public comments and reconsidering the current FCC limits for microwave radiation, aka 'radiofrequency'. Once more I have come across new information, new articles, and a reply from one of the scientific researchers that need to be included in the FCC's discussion for reconsidering the current existing FCC's RFR transmission standards as stated in Proceeding 13-84.

In my opinion, Big Wireless and the FCC by extension is using Proceeding 13-84 to push for and "harmonize" FCC standards with INCIRP 2010's standards as seen by an onsite visit by Qualcomm in early December 2013—see Qualcomm's ex parte filed in early December here: <http://apps.fcc.gov/ecfs/comment/view?id=6017479346>

It seems that the FCC has now become an extension of Big Wireless since the new FCC Chairman Wheeler, formerly the CTIA President for many years, announced upon taking office in early November 2013 his philosophy that "market competition, not regulation, will guide the growth of the telecom sector and provide greater options for consumers." (See <http://tinyurl.com/kw53sgs> dated 11/05/2013, Washington Post)

It is a gross injustice that there has been no monitoring of ambient radiation since 2000, when the EPA's ambient radiation level testing was ended after Congress defunded that program.

I wrongly assumed that it was self-evident that the FCC RFR transmission 1996 standards were set way too high and was surprised to see both the CTIA, Qualcomm, IEEE, INCIRP and the FCC lobby to raise existing RFR transmission levels using Proceeding 13-84.

I am shocked that the FCC doesn't recognize current levels of RFR to be a threat to human health because there is no way for example to stop being exposed to adjacent neighbor's WiFi networks or their SmartMeters, or HotSpots, or the Cellph Mast across the street. Imagine living in an apartment level where every neighbor has their own home wireless network and you are exposed to not only your own home WiFi, but that of more than 20 or 30 different wireless networks from neighbors in the floor below, above and adjacent to you. Imagine the catastrophic health disaster if on top of all this involuntary WiFi exposure that you can't control or turn off, you're also exposed to the

apartment buildings' bank of smartmeters. You have a recipe for a public health disaster. Obviously, and using commonsense, this is extremely dangerous because there is NO REGULATION in place to protect consumers from non-thermal affects caused by wireless radiation from being exposed to by home or office WiFi networks. To repeat: current thermal based RFR transmission standards provide absolutely NO PROTECTION whatsoever from the non-ionizing effects of wireless radiation. However, the FCC has stated that these standards committees have deemed current RFR transmission levels safe in a letter addressed to the Los Angeles Unified School District which is part of their Proceeding 13-84 here:

<http://apps.fcc.gov/ecfs/comment/view?id=6017462167>

"In 1996, the Commission adopted its current guidelines for human exposure to RF energy based on recommendations from the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), and other federal health and safety agencies. These recommendations were derived from guidelines issued in the United States by the Institute of Electrical and Electronics Engineers, Inc. (IEEE). and the National Council on Radiation Protection and Measurements (NCRP)."

Here is the ICES/IEEE comment submitted to the FCC in August last year and have copied below the appropriate statement from their comment and also provided the FCC webpage. As noted in earlier emails, Big wireless (CTIA, Qualcomm), backed by the ICES/IEEE/INCIRP, want to double the current thermal based exposures as stated quite explicitly in this comment filed with the FCC August 2013 here, and here's why:

<http://apps.fcc.gov/ecfs/comment/view?id=6017465380>

COMMENTS OF THE INTERNATIONAL COMMITTEE ON ELECTROMAGNETIC SAFETY (ICES) OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, (IEEE) INC.

"to adopt the ICNIRP and IEEE C95.1-2005 SAR values of 2 W/kg averaged over 10 g of tissue for exposure of the general public and 10 W/kg averaged over 10 g of tissue for exposure in controlled environments."

Why?

The resulting ICES/IEEE position on the existence of low levels effects is this: *"Despite more than 50 years of RF research, low-level biological effects have not been established. No theoretical mechanism has been established that supports the existence of any effect characterized by trivial heating other than microwave hearing. Moreover, the relevance of reported low-level effects to health remains speculative and such effects are not useful for standard setting."* (Annex C.1.2, page 82 of IEEE C95.1-2005.)

In contrast, researcher/scientist/author Olle Johansson's research shows this to be completely wrong; here is Olle Johansson's paper from last June 2013

'Evaluation of specific absorption rate as a dosimetric quantity for electromagnetic fields bioeffects,' addresses thermal based standards based on SAR measurements, and copied results summary below, and also attached as a pdf:

<http://www.plosone.org/article/fetchObject.action?uri=info%3AAdoi%2F10.1371%2Fjournal.pone.0062663&representation=PDF>

Conclusions: SAR actually refers to thermal effects, while the vast majority of the recorded biological effects from man-made non-ionizing environmental radiation are non-thermal. Even if SAR could be accurately estimated for a whole tissue, organ, or body, the biological/health effect is determined by tiny amounts of energy/power absorbed by specific biomolecules, which cannot be calculated. Moreover, it depends upon field parameters not taken into account in SAR calculation.

Thus, SAR should not be used as the primary dosimetric quantity, but used only as a complementary measure, always reporting the estimating method and the corresponding error. ***Radiation/field intensity along with additional physical parameters (such as frequency, modulation etc) which can be directly and in any case more accurately measured on the surface of biological tissues, should constitute the primary measure for EMF exposures, in spite of similar uncertainty to predict the biological effect due to non-linearity.***

Lastly, I want to disclose that **the former CEO of Microsoft Canada, Frank Clegg, has recently gone public on the link between wireless and illness in a very important article recently published on 02/01/2014 in Vitality Magazine** which I am uploading as an attachment in addition to the webpage for this article:

Invisible Threat: The Link Between Wireless Radiation & Serious Illnesses

<http://vitalitymagazine.com/article/invisible-threat/>

This truly is a must read article and I have excerpted a few paragraphs here:



INVISIBLE THREAT <http://vitalitymagazine.com/article/invisible-threat/>

09:23 pm February 1, 2014 • by Frank Clegg



The longtime president of Microsoft Canada is now our country's leading advocate for wireless radiation safety. Vitality invited high tech leader Frank Clegg, now CEO of the new non-profit

INVISIBLE THREAT <http://vitalitymagazine.com/article/invisible-threat/> continued

organization, Canadians for Safe Technology (C4ST), to update our readers on what Canada is (or is not) doing to protect your health, and what you can do in this election year to protect yourself and your children. Here is a report on his research and conclusions.

It has been three years since the World Health Organization shocked the medical community by warning that exposure to microwave radiation from wireless devices might increase our cancer risk. If the same elite cancer specialists were to meet again today, the warning would be upgraded from a "possible carcinogen" to a "probable carcinogen." That is according to Professor Emeritus Anthony Miller, of the University of Toronto, who was speaking recently to Toronto's Public Works and Infrastructure Committee. (1)

The Link Between Wireless Radiation and Illness

Since I helped found Canadians For Safe Technology (www.C4ST.org), I have personally met too many people who are suffering from over-exposure to wireless radiation. Cancer isn't the only risk.

INVISIBLE THREAT <http://vitalitymagazine.com/article/invisible-threat/> continued

About 10 years ago Bill Townsend, a former radio talk show host who now works at Humber College, was the father of a sick family. His very young son had been in surgery for his tonsils, and his even younger son had been diagnosed with adenoid swelling that was resulting in a lack of sleep. His wife had chronic skin rashes that had progressed to her face and also suffered dizziness. When his wife's doctor found she had the same adenoid swelling as their son, he scheduled both Bill's son and his wife for surgery on the same day.

Bill became suspicious when he started to get sinus swelling himself. So he conducted an internet search and found information linking Wi-Fi to sudden onset chronic health problems including heart irregularity, headaches, nausea, poor sleep, as well as skin rashes and sinus swelling.

Bill then realized there was a direct link between his family's health decline and the installation of a Wi-Fi router in his house. He made a simple decision to turn off the Wi-Fi, and instead hardwire all computers in his home. His wife and son's symptoms reversed so quickly that on the day before surgery their doctor gave them both a clean bill of health and cancelled both operations. Bill's own symptoms also quickly disappeared.

Increasing Rates of Electrosensitivity

Electrosensitivity is not like an allergy you are born with; it is an illness that builds up over increased time and radiation exposure. Just as we cannot yet explain why some individuals will die from second-hand smoke and others can live a long life smoking 2 packs a day, we cannot explain why some individuals react to wireless radiation. But with more and more cell towers and smart meters crowding into our living spaces, with

Wi-Fi in buses, schools, trains, offices and hotels, people who are sensitive now struggle to work, travel and support their families.

The Tech Exec's 5-Step Guide to Wireless Safety

1. CELL PHONES:

- a) Keep cell phones away from your head (use the speaker or airtube earbuds; not bluetooth) and out of your pocket, bras, or clothing.
- b) Don't sleep with an active cell phone near you. Use airplane mode only. It keeps the phone functions on, but blocks incoming/outgoing calls and text.
- c) Children should not be near a connected cell phone or tablet device. Cell phones and tablets should not be used as toys.
- d) Forward your phone to your landline when at home.

INVISIBLE THREAT <http://vitalitymagazine.com/article/invisible-threat/> continued

2. CORDLESS PHONES: Remove all cordless phones. If you must have them, keep them away from high use areas and bedrooms and put them on a timer or turn them off every night. The base-station is the heaviest emitter of radiation, more than the hand-held phone.

3. WI-FI: Remove the Wi-Fi in your home. If you cannot remove it, turn it off when not in use, minimally put it on a timer or turn it off every night. Make sure it is not where someone is exposed all day, such as a bedroom or study.

4. BABY MONITORS: Never place a wireless baby monitor (video or audio) by your child's bed. Use a wired monitor. Mothers, do not carry the monitor near your body.

5. SMART METERS: If possible, opt out of any smart meter installations for hydro or water. If not possible, try to have it placed away from bedrooms or other high use area, or consider the use of a protective screen.

It's worth noting that even the manufacturers won't declare their products "SAFE." The presidents of Bell, Rogers, Telus, or any cell phone maker will not declare publicly that their products are safe. In the U.S., the spokesman for the wireless industry association, Dane Snowden, is on record as testifying to the State Legislature of Vermont: "Industry has not said once – not once – that cell phones are safe. The federal government ...has said it is safe."

Lax Federal Guideline Is a Danger to Public Health

This is perhaps the most critical point in the discussion. Our lax federal guideline needs to be rigorously updated. Health Canada's Safety Code 6 which governs the safety of cell phones, cell towers, Wi-Fi, smart meters and microwave ovens has not been significantly updated since the 1970s, long before Wi-Fi was invented or cell phones were sold. But even manufacturers discreetly warn of possible health problems – in their fine print. This warning comes with the Apple iPad2: (9)

"You can further limit your exposure by limiting the amount of time using iPad in wireless mode, since time is a factor in how much exposure a person receives, and by placing more distance between your body and iPad since exposure level drops off dramatically with distance."

The packaging with iPhone5 states: "Carry iPhone at least 10 mm away from your body to ensure exposure levels remain at, or below, the as-tested levels."

(To find these warnings, you have to hunt for them. Go to Settings – General – About – Legal – RF Exposure)

INVISIBLE THREAT <http://vitalitymagazine.com/article/invisible-threat/> continued

Blackberry warns users to keep their phones an inch away from any part of their body whenever it's turned on, "including the abdomen of pregnant women and the lower abdomen of teenagers." (10)

For men, keeping your cell phone in a trouser pocket in talk mode may impair fertility. (11) Putting a Wi-Fi-enabled computer on your lap has also been shown to alter sperm motility.

Wi-Fi Linked to ADHD, Learning Disorders

A recent study demonstrated that pregnant women should be careful about their use of cell phones. Dr. Hugh S. Taylor, chief of reproductive endocrinology and infertility for Yale Medical Group says, "We have shown that behavioral problems in mice that resemble ADHD are caused by cell phone exposure in the womb. The rise in behavioral disorders in human children may be in part due to fetal cellular telephone irradiation exposure." (12)

Children are especially vulnerable since their skulls are thinner and certain tissues of a child's head, including the bone marrow and the eye, absorb significantly more energy than those in an adult head. (13) A highly regarded study from 2011 showed that radiation from a cell phone penetrated 10% of an adult head, whereas it penetrated the skull of a five year old 70%. (14)

Thank you again for taking public comments, and then allowing for a period of followup replies to comments as well. Please lower standards asap for radiofrequency/microwave radiation.

I understand that the wireless industry is extremely important to the US economy, but there are better and safer ways of providing access to the internet (cabled connections) so that we don't suffer so much. As it is, we are killing ourselves from the diseases caused by RFR exposure which may not only lead to sterility but also result in passing on permanent genetic birth defects onto the next generation) all for the sake of wireless convenience, without knowing the tragic health consequences until it is too late. Thank you for your consideration of my comments, replies and attachments and concern for people's health. Please seek out the guidelines from the BioInitiative Report updated in 2013, that is where the FCC should go, not to the industry sponsored/supported IEEE and INCIRP committees.

Regards,

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