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ACC Commissioners
1200 West Washington
Phoenix, AZ 85007

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AZ CORP COMMISSION
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Dear Commissioners,

Lucky we have found this sworn legal document: "Second Amended Declaration of Curtis Bennett." It supports a heroic father who is suing a Portland, Oregon Public School, for its use of Wi-Fi. I hope the school will be prevented from turning its students into *electromagnetically lobotomized zombies*.[1]

Bennett's legal declaration complements his "**Diagnosis: Extinction"** interview by William Thomas, posted in docket E-01345A-13-0069, on July 15, 2014.[2] For example, Bennett amplifies on how Wi-Fi's jagged 2.4 or 5 billion hertz pulses overpower 8 hertz human brains. Both 'smart' AMI and Wi-Fi technologies deploy pulsed microwave mesh networks, and are similarly organized to promote harm.

Particularly interesting, is "Zhou et al., Collapse of DNA in ac Electric Fields... quoted from **The DNA also collapses**." According to Bennett, if Health Canada had shared the mechanism, the W.H.O. would have reclassified the frequencies as Group 1: carcinogenic to humans.

Am sure we all know that 'smart' AMI and Wi-Fi similarly use bio-toxic pulsed microwaves, that have been used in military weapons. APS AMI uses 900 MHz and 2.4 GHz. Wi-Fi in Portland schools is quoted as using 2.4 GHz or 5 GHz. Both deploy jagged pulsed microwave mesh network technologies.

Life on Earth evolved in naturally healthy environments of 7.83 Hz, now known as The Schuman Resonance.

Respectfully submitted,

Patricia Ferre'

Arizona Corporation Commission
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[1] http://images.edocket.azcc.gov/docketpdf/0000154683.pdf
[2] Ibid.

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Shawn E. Abrell, WSB No. 41054, *Pro Hac Vice*
4614 SW Kelly Avenue, Suite 200, Portland, Oregon 97219
Tel.: 503.224.3018 Fax: 503.222.0693
E-Mail: shawn.e.abrell@gmail.com
Lead Counsel for Plaintiffs

Tyl W. Bakker, OSB No. 90200
621 SW Alder, Suite 621, Portland, Oregon 97205
Tel.: 503.244.4157; Fax: 503.220.1913
E-Mail: tylbakker@gmail.com
Local Counsel for Plaintiffs

United States District Court

District of Oregon

Portland Division

AHM, by and through
her Guardian *ad litem* and father,
David Mark Morrison**,** and
David Mark Morrison, individually,

Plaintiffs,

v.

Portland Public Schools,

Defendant.

Civil Action No. 3:11-cv-00739-MO

Second Amended Declaration of Curtis Bennett

I, Curtis Bennett, under penalty of perjury pursuant to 28 U.S.C. § 1746, hereby make the following declaration in support of a preliminary and permanent injunction enjoining Portland Public Schools' use of WI-FI:

1. I am the world's foremost authority on applying infrared technologies at molecular levels. I am committed to contributing to the overall improvement of the Earth's ecosphere by extending mankind's vision beyond the visible.

2. I am a Canadian Interprovincial Journeyman Electrician (Red Seal) with a theoretical and practical background in electromagnetic field designing. My education included extensive mathematical theory substantiated in a practical, laboratory environment. Ultimately, I earned Canadian provincial and national credentials.

3. I earned a construction engineering technologist (building construction and design) Diploma from the Northern Alberta Institute of Technology. This education consisted of every aspect of construction, from contracts to completion.

4. I completed an education in engineering, magnetic fields, heat transfer, and electron flow specifically to compliment my extensive background with a technology that allows us to see temperature beyond our visible spectrum.

5. I have consulted with defense agencies, oil, gas, lumber, mine, and manufacturing industries, hydrologists, fire departments, medicine, energy, governments, municipalities, and insurers.

6. As a first response consultant, I consulted the Defense Minister for the Canadian Military (Canada's Chief in Command) on the vulnerability of Canadian (and other countries') ports after 9/11.

7. I have extensively studied theory on magnetic and electromagnetic fields, including radiofrequency fields, for many years. It is how we produce electricity.

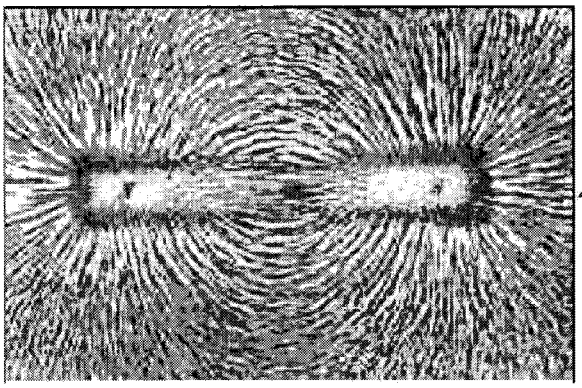
8. I have presented to Canada's Standing Committee on Health specific to 'An Examination of the Potential Health Impacts of Radiofrequency Electromagnetic Radiation.' http://www.magdahavas.com/wordpress/wp-content/uploads/2010/04/HESA-Report-final.pdf. Prior to presenting to the committee, I informed Health Canada of the error in safety code as our jurisdictional authority regarding the dangers of radio frequency interaction with humans. I reported

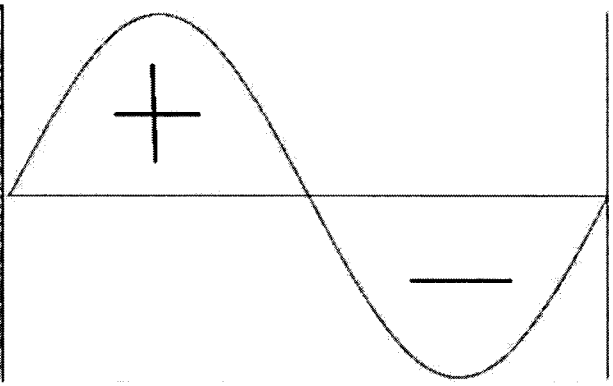
that safety standards and Canada's Safety Code 6 (Canada's requirements for the use of radiation emitting devices) contained errors or omissions substantiating harm is being done. Specifically, in September, 2010, I discovered an error in Health Canada's Safety Code 6, which I reported to Health Canada and followed-up in October as expert witness for Canadian Parliament's Standing Committee. The error is that Safety Code 6 failed to consider that any given person is an intricate unprotected electrical unit with its own frequencies and voltages. Safety Code 6 treats humans as a piece of tissue or furniture and negates to mention human frequencies or electrical sensitivity. Safety standards negating the electrical conflicts made the process miss causation or the mechanism scientifically linking harm with electromagnetic frequencies (EMFs). Thus, the failure to include people has resulted in no consideration for the frequency conflicts between radiofrequency radiation and humans. The only reason I picked up on the missing electrical aspects of humans is because of the rollover of our work into medical education. As electrical professionals we don't deal with human electrical properties, we aren't allowed to use them for conductors.

9. Academia of the world is literally blind to temperature, and after decades of advanced research as an infrared consultant (all applications), I now lecture for education credits needed for medical licensing(see CurtisBennett credentials). I have presented in the United States & Canada to Medical Doctors and health professionals regarding the dangers of radio frequency interaction with humans(see cell phone radiation images from 2002). By employing infrared at the molecular level, we are able to see things such as breast cancer, below surface groundwater (nature's hidden treasure) www.thermoguy.com/groundwater.html , and forest fires through blinding smoke http://www.thermoguy.com/blog/index.php?itemid=39 . Another application is showing how solar electromagnetic fields are causing buildings to 'burn,' or generate extreme heat, which they are not designed http://youtu.be/dKGHKTkqeMc . It is a program where concepts of cellular energy and the function of the human body are integrated with the growing focus on the dangers of radiofrequency radiation, including WI-FI, and cellular technology.

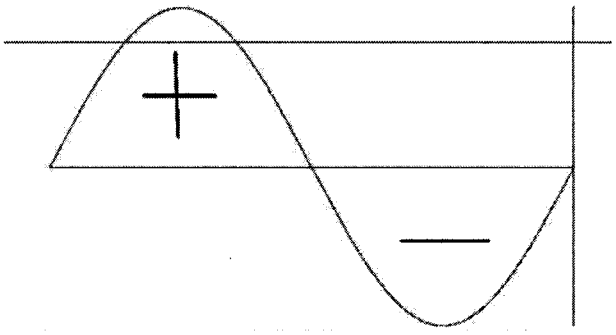
My participation in the medical program includes magnetism, electromagnetic frequencies, and the mechanism as to how they are dangerous **http://youtu.be/jcBDxpSWA4k**. Additionally, I lecture regarding buildings and their toxins, groundwater, forest fires and their toxicity, medical imaging including before and after images of physiology changes with treatment. My presentation of environmental pollution is of electromagnetic fields versus magnetic fields. In the application of schools and electromagnetic fields, what I teach and offer as testimony herein, includes the following:

a. The following show a magnetic field versus an electromagnetic field:





The picture top left is a magnetic field of a bar magnet. The top right diagram is an electromagnetic field, represented by a frequency. Unlike the electromagnetic filed, the magnetic field doesn't have a frequency and would measure as a straight line (red) which is demonstrated below:



b. To create electricity you need a **magnetic field, a conductor, and motion.** We create electricity by moving a conductor through a magnetic field or by moving the magnetic field around the conductor. When it comes to children in a WI-FI environment, the WI-FI router is providing the magnetic field while also moving the field (at 2.4 or 5 GHz),

children are the conductors. The admitted power density in the classrooms is effectively putting the unprotected children as well as the teachers inside the circuit.

c. As conductors within the electromagnetic fields, children, teachers, and staff are very precise, as well as intricate, electrical beings functioning healthily at approximately 7.8 Hz and 25 to 100 Mv.

d. WI-FI is installed to communicate with the wireless devices called computers. The other wireless devices in the room, called children, do not function at wireless frequencies. Human cells operate at low voltage, their own frequencies, and to impose a very fast foreign frequency at GHz speeds on the human electrical system causes serious electrical problems.

e. At a molecular level, these fast radiofrequency waves are going through humans causing atoms and molecules to change direction or polarize at twice the frequency. Other results are ***electrical induction of and*** eddy currents within human biological systems. We know with absolute certainty that induction must be happening because SAR values themselves are the Specific Absorption Rate, which is caused by induction. The resultant heat can be caused by electromagnetic induction as (i) heat is a byproduct of creating currents in the body, (ii) the body polarizing at twice the frequency produces heat (microwave effect), or (iii) heat[1] could result from electrical failure from mixing frequencies. The diagrams below evidence electrical induction (the 'Dead Line' represents a conductor/child):

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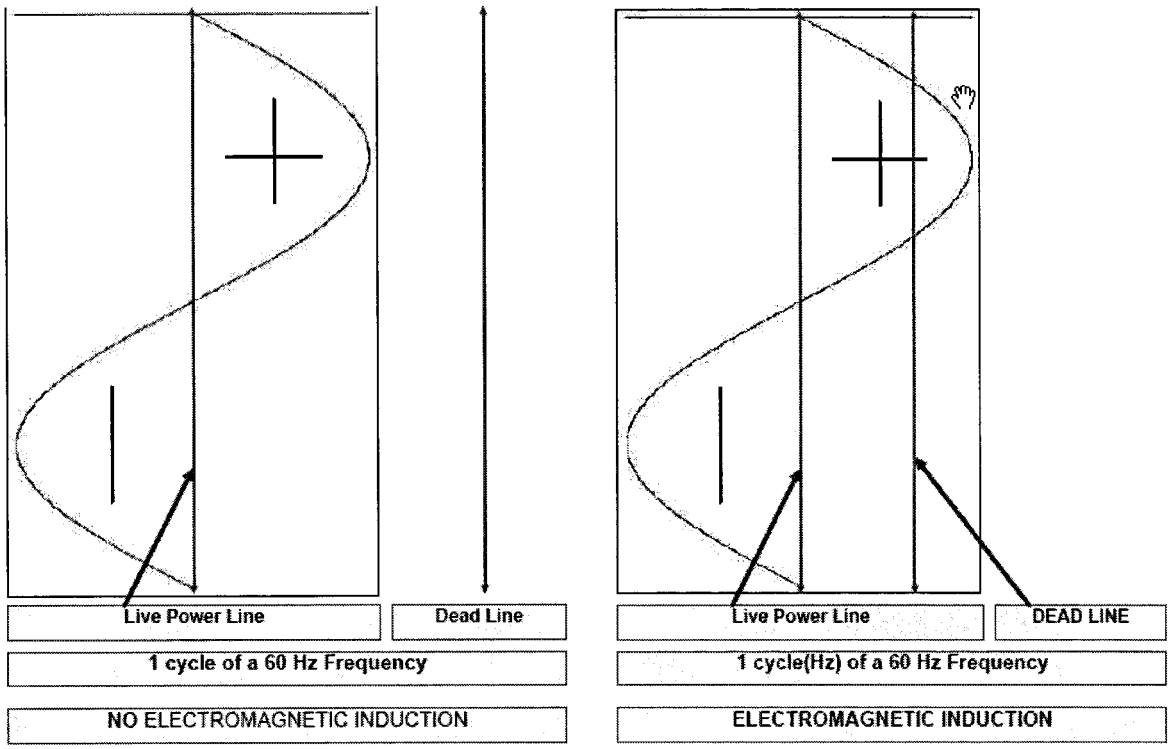
[1] Safety standards admit heat is generating, which is why a power load (volts times amps) (specific absorption rate) was assigned to tissue of 1,000 microwatts/cm2 of localized heat. What causes the heat is electromagnetic induction. The error or mechanism missing in safety standards is they negated to consider all the frequencies or electromagnetic fields, such as humans.



f. Electromagnetic induction on a bare conductor (a child) running at its own frequency brings on a host of electrical problems for the unprotected child including nerve and muscle depolarization (stimulation), in addition to heat. Canada's Safety Code 6, which is based on similar international standards as used in the United States, provides that the unintentional excitation of tissue is to be **avoided** as is **heat effect** because studies show it can lead to nerve and muscle depolarization.[2] Depolarization is part of the natural process but should not be initiated because of electromagnetic induction (electromagnetic triggers like opening a car door from inside.

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[2] 'For frequencies from 3 to 100 kHz, *the predominant health effect to be avoided is the unintentional stimulation of excitable tissues,* since the threshold for electrostimulation in this frequency range will typically be lower [less radiation or slower frequencies] than that for the onset of thermal effects. *Experimental studies have demonstrated that exogenous electric and magnetic field exposures can induce in situ electric fields and currents within biological tissue that can lead to nerve and muscle depolarization* * * *. Limits for maximum external electric and magnetic field strengths have been established in Safety Code 6 to avoid *in situ* electric field strengths greater than that of the minimum excitation threshold for excitable tissues.' (Italics added) Health Canada, Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz Safety Code 6 (2009), http://www.rfsafetysolutions.com/PDF%20Files/Health%20Canada%20Safety%20Code%206%20Standard_2009.pdf.

the building). By way of example, recent work by Zhou *et al.*, suggests intermediate frequency fields allow large segments of the DNA molecule, but not its entire length, to become polarized. This polarization causes charge to pile up at bends or clumps, which then attract one another, causing the DNA polymer to collapse. Zhou *et al.*, *Collapse of DNA in ac Electric Fields*, Phys Rev Lett 106, 248103 (June 16, 2011), quoted from *The DNA also collapse s http://physics.aps.org/synopsis-for/10.1103/PhysRevLett.106.248103.* On June 22, 2011, this phenomenon was discussed by the The Lancet, summarizing the latest International Agency for Research on Cancer's reclassification of radiofrequency electromagnetic frequencies as a 'possibly carcinogenic to humans' (Group 2B): (with the reported mechanism linking the frequencies to adverse health effects, if Health Canada had shared the mechanism, the W.H.O. would have reclassified the frequencies as a Group 1 as causing cancer).

> *EMFs generated by RF sources couple with the body, resulting in induced electric and magnetic fields and associated currents inside tissues.* The most important factors that determine the induced fields are the distance of the source from the body and the output power level. Additionally, the efficiency of coupling and resulting field distribution inside the body strongly depend on the frequency, polarisation, and direction of wave incidence on the body, and anatomical features of the exposed person, including height, body-mass index, posture, and dielectric properties of the tissues. Induced fields within the body are highly non-uniform, varying over several orders of magnitude, with local hotspots. See, http://www.natap.org/2011/newsUpd ates/062311_01.htm. (there is no acceptable induction allowed)

g. A 2009 study found an underestimation of exposure to children in the 1,900 MHz (220 percent) and 835 MHz (144 percent) frequencies, and which will be true for 2.45 GHz and 5 GHz frequencies as well:

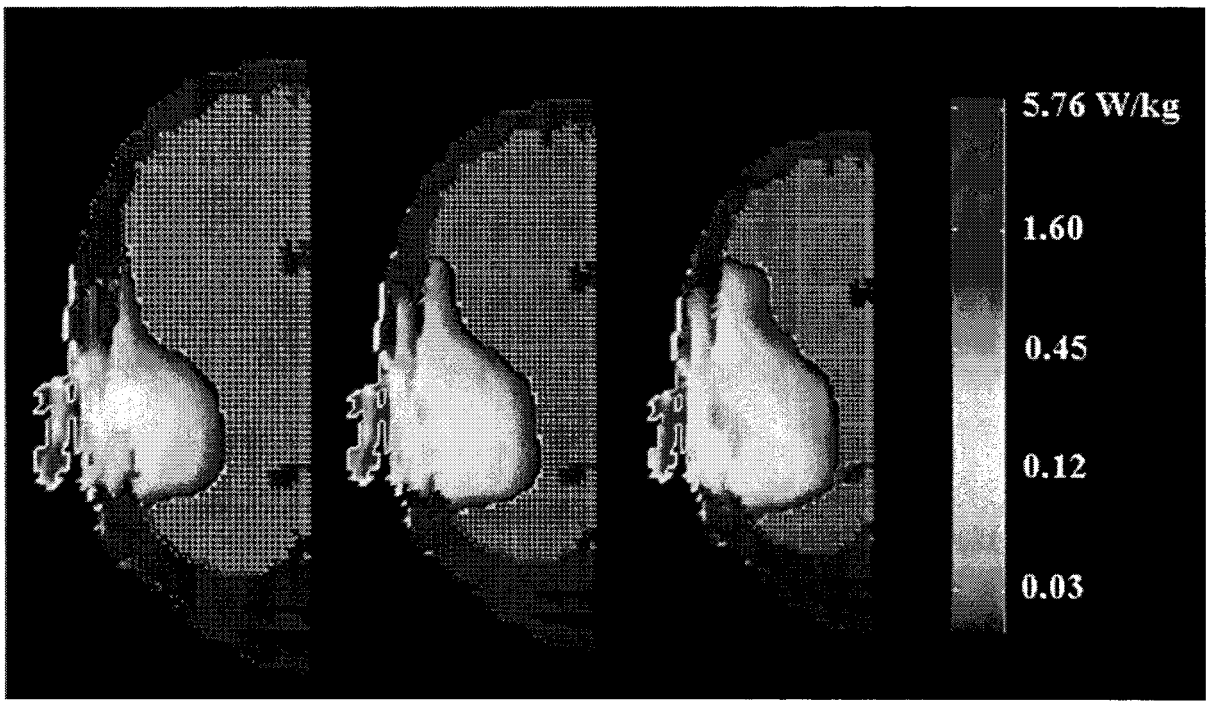
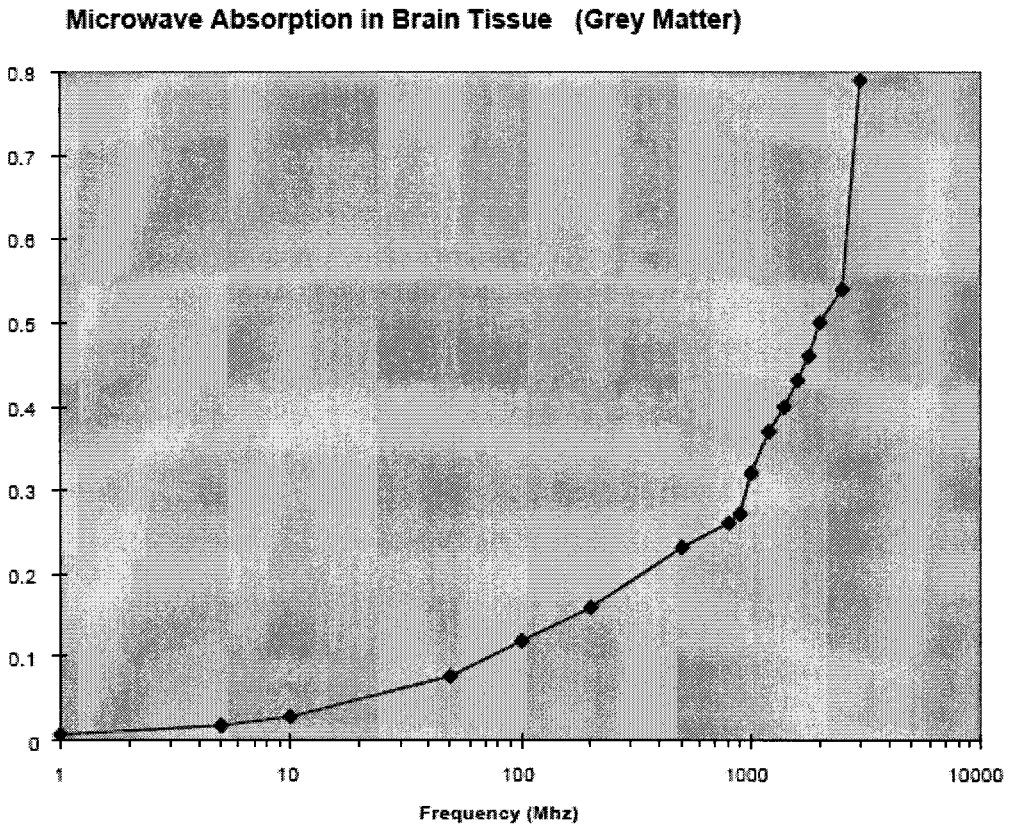


Figure 2. SAR distribution at 1900 MHz: (a) 11.1% larger, (b) average, and (c) smaller, Ghandi & Kang, Phys. Med. Biol., 47, 1501-18, 2002.

The underestimation of exposure was due to the thinner pinna and the skull for the smaller models which results in closer placement of the mobile telephones to the brain of children. This is Because of the larger height, the adult head is generally in the weaker magnetic field region resulting in lower induced current densities for the brain for adults. The heads of children, on the other hand, are in the stronger magnetic field regions resulting in higher induced currents for the brain as compared to adults. Underestimation of EMF/NIR Exposure for Children for Mobile Telephones and for Electronic Article Survellance(EAS) Systems. Om P. Gandhi, www.icems.eu/docs/brazil/Gandhi_09.ppt. Present frequency exposure is based on 6 minute exposure for adult males.

h. The graph below, from physicist William Curry PhD,'s presentation Wireless LANs in the Schoolroom, shows how absorption in brain tissue (grey matter) increases exponentially toward the ultra-high frequency (UHF) area of the microwave oven and WiFi. (I have included a link to a declassified military document where they refer to microwave hearing? Popping noises they found were associated with the thermal elasticity of the brain) http://www.thermoguy.com/pdfs/Bioeffects_of_Selected_Non-Lethal_Weapons.pdf



Curry, Wireless LAN's in the school room, http://www.stayonthetruth.c
om/wireless-lans-in-the-school-room---bill-p-curry.php

i. The graph abpove, from physicist William Curry PhD,'s presentation Wireless LANs in the Schoolroom, shows how absorption in brain tissue (grey matter) increases exponentially toward the ultra-high frequency (UHF) area of the microwave oven and WI-FI.

j. In the case of the Portland Schools, the additional, unused but still deployed carrier frequency of 5 Hz would likely increase absorption in other, smaller organs, such as the thyroid.

k. The graph also illustrates the problem with the drive of the wireless industry toward ever-higher frequencies within the cm microwave band. While nearly all the lower frequency bands have already been allocated by the FCC for specific types of radio transmissions, and transmission of ever more information content on any given channel requires greater bandwidth, each new deployment undermines further the integrity of the population's health. Engineers who design these systems have no training that would qualify them to consider the effects on biologic systems, which is why public health scientists need to be called in to policymaking prior to contracting and deployment, not after the fact.

l. I also wish to speak about the direct effects of RF/MW radiation upon the human organism are not the only known effects. According to Howard Bassen, PhD of the Food and Drug Administration (FDA), there are 'increased reports that medical devices, such as pacemakers, apnea monitors, electrically powered wheelchairs, etc., have failed to operate correctly because of interference from various emitters of radiofrequency energy * * * Reasons for this problem are twofold: 1) increasing numbers of electronically controlled medical devices with inadequate electronic protection against RFI, and 2) a significant increase in the number of RF sources in the environment.' http://ewh.ieee.org/soc/embs/comar/interfer.htm. This is another strong reason why WI-FI should not be introduced into the school environment. Central Maine Power is installing smart meters and admit the frequencies are interfering with electrical devices inside buildings. In recent public forums, I have been asked specifically about pacemakers and health monitoring equipment in extended care facilities with disabled patients. The frequencies will affect health and possibly interfere with health monitoring equipment which administers medications plus much more. http://www.dslreports.com/shownews/Power-Utility-

Smart-Meters-Causing-Router-Interference-117120.

m. Dr. Bassen also acknowledges the scale of this problem: 'Hundreds of incidents of RFI induced medical device failure have been reported, studied, and summarized * * * The consequences have ranged from inconvenience to serious injuries and death. However, many more incidents may occur that are not reported because most users of medical devices are unaware that RF fields are present when problems are recognized and because of the intermittent nature of the failures that could cause them to be unobserved.' *Id.*

n. This problem is not new, but long-established, and interference can occur even from very distance infrastructure, and at exceedingly low radiation levels. As Dr. Bassen states: 'In the mid-1980s, * * * FDA had become aware that approximately 60 infants died in the United States while being monitored for breathing cessation by one model of apnea monitor. Subsequent tests have shown that this particular monitor is extremely susceptible to low level RF fields, including those from *mobile communication base stations several hundred meters away and FM radio broadcast stations more than one kilometer away.* [Emphasis added.] Other apnea monitors have been shown to be similarly susceptible to malfunction...Cellular phones have also been shown to cause unintended firings of implantable cardiac defibrillators. Governments and taxpayers are funding health costs, wireless technologies are contradicting those objectives. Sudden Infant Death Syndrome rates in British Columbia, Canada are up 30 percent over 2010. The B.C. Coroner's Office under the Solicitor General of BC is investigating. In our inquiry as to electromagnetic triggers from wireless technologies contributing to vulnerable babies stopping breathing, we are asked to submit electrical information to the Coroner's Office on the EMFs as well as the medical education program lecturing the dangers of Wi-Fi in medical education. I have provided additional information to the Coroner's Office on the BC Smart Meter program bringing emfs to people's homes.

o. Dr. Bassen also acknowledges FDA's awareness that pulse-modulated wave, such as wifi deploys, exacerbates interference: 'Modulation also affects the degree of interference for a given set of exposure conditions; amplitude modulation (including pulsed RF) is usually the most significant for RFI. *Id.*

p. We see biological effects in water lines conditioned with a weak electrical signal. Goldsworthy A (1999), Whitney H, Morris E, Biological Effects of Physically Conditioned Water (available upon request), Biology Department, Imperial College of Science Technology and Medicine, London, Wat. Res. Vol. 33, No. 7, pp. 1618-1626, 1999. It shows that ordinary town water supplies, when treated with pulsed radio frequencies (as used to remove lime scale from plumbing) becomes biologically active in yeast, probably by removing calcium from cell membranes. The results were broadly similar to those of direct exposure to electromagnetic fields and is what prompted Dr. Goldsworthy to conclude that calcium removal from cell membranes was a likely mechanism for the observed biological effects on animals. The chilling possibility to emerge from this was that the biological effects of electromagnetic fields could be transmitted in the bloodstream (like the water) and exposure in any part of the body could have an effect all over the body, not just the parts that are directly exposed; nowhere is safe.

10. I have personal knowledge of Portland Public Schools WI-FI installation, which operates at carrier signals of 2.45 and 5 GHz or 2.45 and 5 billion Hz (cycles per second). Conflicting electromagnetic frequencies (electromagnetic compatibility) between WI-FI and children (approximately 7.8 Hz & 25 to 100 mV) are producing severe electrical problems that would cause function failure in similarly tuned electro-mechanical devices in use for commercial industry or homes, computers. See for example, *Effects of 6-10 Hz ELF on Brain Waves*, Article by David S. Walonick, originally printed in Borderlands (Vol. XLVI, Nos. 3&4, May – August 1990), http://journal.borderlands.com/1999/effects-of-6-10-hz-elf-on-brain-waves/. This study found evidence that ELF magnetic waves can affect brain waves. The

specific ELF frequencies in studying were 6-10 Hertz, the same as those produced by the human brain in the theta and alpha states. It further stated that, generally, specific brain wave frequency ranges can be associated with mood or thought patterns. Frequencies below 8 Hertz are considered theta waves. While these seem to be some of the least understood frequencies, they also seem to be associated with creative, insightful thought. Alpha frequencies are from 8 to 12 Hertz and are commonly associated with relaxed, meditative states. Most people are in an alpha state during the short time immediately before they fall asleep. Alpha waves are strongest during that twilight state when we're half asleep and half awake. Beta frequencies (above 12 Hertz) coincide with our most 'awake' analytical thinking. *Id.*

11. Based upon are review of the Mount Tabor Middle School WI-FI Floor Plan (Complaint, Ex. A), a given child is subject to signals from multiple WI-FI transmitters and numerous laptops. Each child has different DNA, hydration, toxicity, nutrition, lifestyle, etc.; with the point being every one of them is a different electrical device in the WI-FI application. WI-FI is interacting with each child differently and as it goes through walls, it is going through the children, as well as teachers and staff.

12. RF/MW radiation will interact differently with all material depending on that material's emissivity. Emissivity is a materials ability to absorb or emit wavelengths of radiation. The more absorbent the material, the higher the emissivity. Reflective materials will reflect the EMF radiation and it may hit absorbent material with the reflected angle. The children, and other absorbent material will be interacting with the frequencies. The radiation ultimately is absorbed by children's body tissue, which is one of several substances that rather ideally, meaning maximally, absorbs such radiation. The only upside is that the absorbent materials including the children will heat the classrooms by some tiny increment. But this will not save Portland Public Schools on energy costs; since the WI-FI system itself requires and wastes enormous amounts of energy, as do all wireless infrastructures.

13. The digital wireless signals used in WI-FI are pulsed, ultra high (2.45 GHz) and super high (5 GHZ) frequency signals, emitted in bursts, at regular intervals, in very rapid succession. Imposed on these pulsed ultra and super high frequency microwaves are extremely low frequency modulations of the RF carrier waves. Carrier waves transport data and are also referred to as Information Carrying Radio Waves. This man-made and very complex RF/MW electromagnetic radiation product cannot be compared to the naturally occurring and biologically compatible radiation of our environment, where electromagnetic frequencies are now billions of times higher than levels from which all life evolved. See, Adamantia Fragopoulou, Yuri Grigoriev, Olle Johansson, Lukas H Margaritis, Lloyd Morgan, Elihu Richter and Cindy Sage. Scientific Panel on Electromagnetic Field Health Risks: Consensus Points, Recommendations, and Rationales. REVIEWS ON ENVIRONMENTAL HEALTH VOLUME 25, No. 4, 2010. see http://www.iemfa.org/index.php/all.

14. WI-FI is not even installed for the superficial cost convenience because a safe operational cabled system is already installed into, upon information and belief, each room. Even if the additional initial installation costs of setting up additional wireless routers/switches in each room may at first appear more 'cost effective,' this does not take into account their long-term, overall costs. Moreover, it would have saved money to keep the system that's already in place, and not to override it with a redundant and energy-wasteful one - or two in this instance, since they have 5 GHz deployment that is not even being used, too! Also, the staff and equipment required to manage wireless capacity and to monitor usage, puts the overall costs much higher. So-called 'smart' wireless devices associated with wireless networks can cause unexpected congestion, adding to the costs. Additionally, wired computer stations deliver data faster, safer, and more sustainably, while providing real economy and advancing technology in education. Educational technology advancements are important and can be achieved safer and faster, and without taking from children their privacy rights, as WI-FI does by way of its cyber-insecurity. Wiring is the only option, and represents real, sustainable economic growth.

15. Within the relevant scientific community it is generally accepted many bioeffects and adverse health effects occur as a result of low-level RF/MW radiation exposure, with unrealized domino-effect costs of many kinds, some of which all people will suffer, sooner or later. Specialists also consider the secondary effects to human society of losses of wildlife, essential insects, plants and other environmental damages from ubiquitous and unnatural PM RF/MW radiation.

16. In my opinion as a professional with Canadian national and pro AHM, other students, and school staff and faculty adverse health effects and should be discontinued immediately as this as a national and global emergency.

Dated this 19th day of December, 2011.

/s/ Curtis Bennett

CURTIS BENNETT