

Shawn E. Abrell, WSBA No. 41054, *Pro Hac Vice*
3405 NW 31st Circle, Camas, Washington 98607
Tel.: 503.512.7712; 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: twbpc@pcez.com
Local Counsel for Plaintiffs

United States District Court

District of Oregon

Portland Division

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

Civil Action No. Cv 11-739-MO

Declaration of Curtis Bennett

Plaintiffs,

v.

Portland Public Schools,

Defendant.

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 am the only person in the world who has 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.

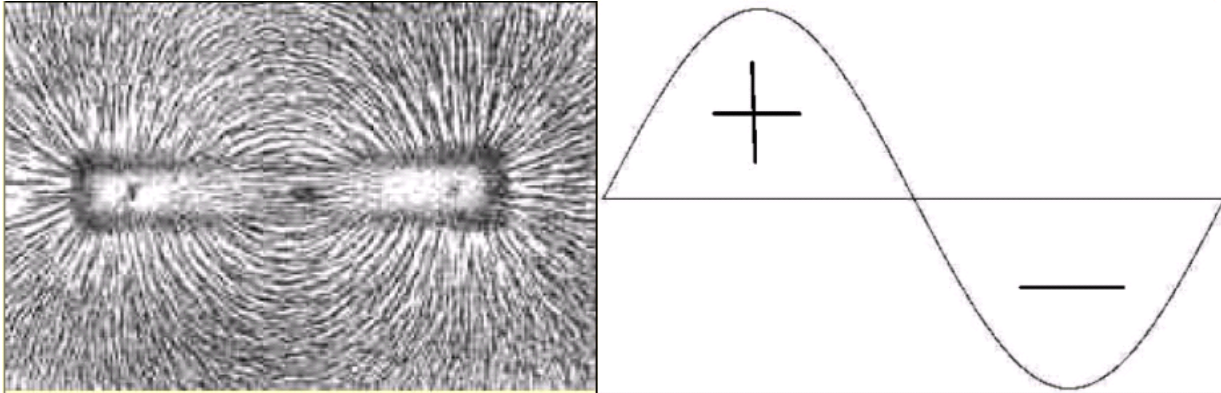
8. I have presented to Canada's Standing Committee on Health specific to "An Examination of the Potential Health Impacts of Radiofrequency Electromagnetic Radiation." <http://www.magdahavas.com/wordpress/wp-content/uploads/2010/04/HESA-Report-final.pdf>.

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

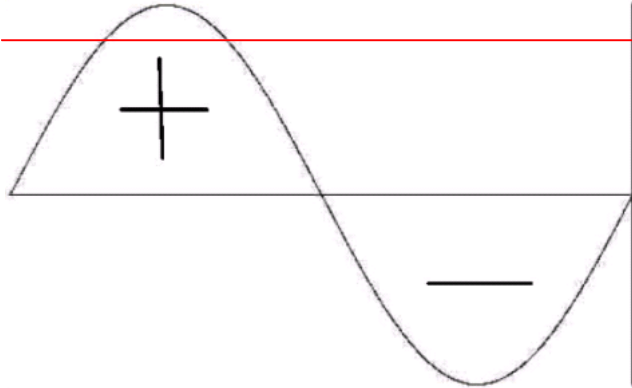
radiation emitting devices) contained errors or omissions substantiating harm is being done. Specifically, in September, 2010, I discovered an error in Health Canada's Safety Code 6, which I reported to Health Canada and followed-up in October as expert witness for Canadian Parliament's Standing Committee. 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.

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. I have presented in the United States to Medical Doctors and health professionals regarding the dangers of radio frequency interaction with humans. By employing infrared at the molecular level, we are able to see things such as breast cancer, below surface groundwater (nature's hidden treasure), and forest fires through blinding smoke. Another application is showing how solar electromagnetic fields are causing buildings to 'burn,' or generate extreme heat, which they are not designed. 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. 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 field, 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.**

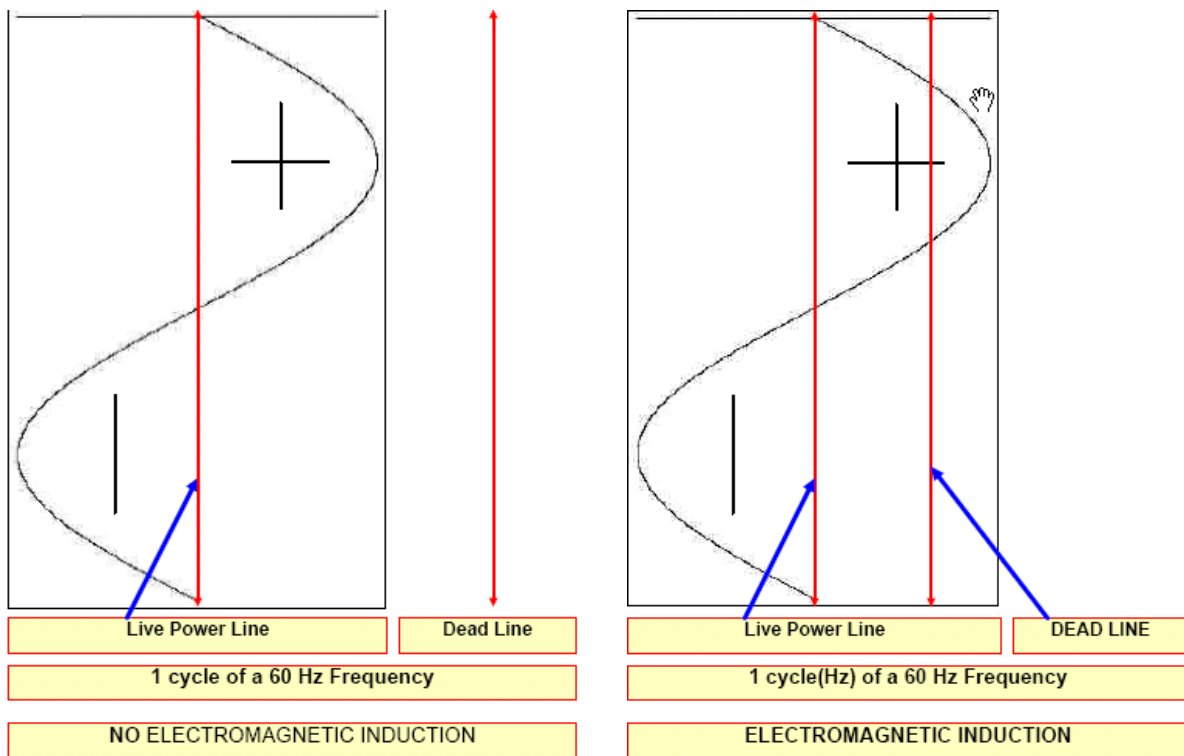
We create electricity by moving a conductor through a magnetic field or by moving the magnetic field around the conductor. When it comes to children in a WI-FI environment, the WI-FI router is providing the magnetic field while also moving the field (at 2.4 or 5 GHz), children are the conductors.

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. 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) heat¹ could result from electrical failure from mixing frequencies. The diagrams below evidence electrical induction (the 'Dead Line' represents a conductor/child):



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, in addition to heat. Canada's Safety Code 6, which is based on similar

¹ Safety standards admit heat is generating, which is why a heat load (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.

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. 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 collapses* <http://physics.aps.org/synopsis-for/10.1103/PhysRevLett.106.248103>. Finally, 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):

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. [http://www.lancet.com/journals/lanonc/article/PIIS1470-2045\(11\)70147-4/fulltext](http://www.lancet.com/journals/lanonc/article/PIIS1470-2045(11)70147-4/fulltext).

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.rfsafety.com/PDF%20Files/Health%20Canada%20Safety%20Code%206%20Standard_2009.pdf.

10. I have personal knowledge of Portland Public Schools WI-FI installation, which operates between 2.4 – 5.8 GHz frequencies or between 2.4 and 5.8 billion Hz. Conflicting electromagnetic frequencies (electromagnetic compatibility) between WI-FI and children (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.

11. Based upon a 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. EMFs will interact differently with all material depending on that material's emissivity. Emissivity is a material's 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 EMFs are ultimately absorbed by children's body tissue, which is one of several substances that absorbs the radiation. The only upside is that the absorbent materials including the children will heat the classrooms and save Portland Public School on energy costs.

13. The digital wireless signals used in WI-FI are pulsed, ultra high frequency signals, emitted in bursts, at regular intervals, in very rapid succession. Imposed on these pulsed ultra high frequency microwaves are extremely low frequency modulations of the radiofrequency carrier

waves. Carrier waves transport data and are also referred to as Information Carrying Radio Waves. This man-made and very complex radio frequency electromagnetic radiation product cannot be compared to the naturally occurring and biologically compatible radiation of our environment where electromagnetic frequencies are billions of times higher than levels from which all life evolved.

14. WI-FI is only installed for a superficial cost convenience or profit because radiating an entire area is arguably cheaper than construction/electrical costs to install a safe cabled system. However, while the basic initial installation costs of setting up wireless routers may at first appear more 'cost effective,' this does not take into account their long-term, overall costs. The staff and equipment required to manage wireless capacity and to monitor usage, puts the overall costs much higher. Smart wireless devices associated with wireless networks can cause unexpected congestion, adding to the costs. The demand for these devices will only increase and result in the need for additional and more powerful access points. Additionally, wired computer stations deliver data faster, safer, and more sustainable while providing real economy and advancing technology in education. Educational technology advancements are important and can be achieved safer and faster. Wiring is the only option and is 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 radiofrequency exposure with unrealized domino-effect costs.

16. In my opinion as a professional with Canadian national and provincial credentials, Portland Public Schools' use of WI-FI is causing and will continue to cause Alexandra Morrison, 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 24th day of June, 2011.

/s/ Curtis Bennett

CURTIS BENNETT