

March 7<sup>th</sup>, 2012

British Columbia Government Parliament Buildings - Room 128 Victoria, B.C.

Att: Energy Minister

cc: Fire Services, MLA Norm Letnick, First Nations, Municipalities, et al

Re: Radio Frequencies Compromising Buildings, Fire Separations, Electrical Systems, Fire Safety, Infrastructure, etc.

Dear Mr. Coleman,

The science of building inspections, building compliance, fire safety, engineering, education, etc is changing daily with the incorporation of more wireless technologies. In order to communicate with smart or wireless devices, wireless infrastructure has to cover entire cities and areas with high speed EMFs. Municipalities, architects, engineers, fire services, education, etc have to be informed that building development and infrastructure is being radiated by high speed EMFs. Development isn't designed for it, insured for it, funded for it and it will adversely affect development objectives.

Technology moving faster than science and education has already produced critical errors for the limits of human exposure. Ecosystems, pollinators, building development, biology or biological systems all have their own electricity and frequencies. Biological systems are very vulnerable to EMFs and literally **every** change in frequency exposure from 3 KHz(3000 Hz) to 300Ghz(300,000,000,000 Hz) is a different

electrical/biological/neurological/physiological, etc equation that isn't being considered.

## **Limits of Human Exposure to RF EMFs**

Health Canada's Safety Code 6 is the law governing limits of human exposure to Wi-Fi, smart meter and cellphone **frequencies**. Canada uses the same science standards as the FCC and other international organizations. Even though safety standards are based on decades of scientific literature, the code admits the mechanism has been missing linking the frequencies to adverse health effects.

The mechanism linking the frequencies to adverse health effects was reported to Health Canada and by expert witness through Canadian Parliament's Standing Committee on Health. An error or omission in Safety Code 6 prevented the mechanism linking adverse health effects from being represented. Safety Code 6 failed to include the volts, amps, frequencies, power densities, etc or vulnerability of **EACH** impacted biologic system with **EACH** specific frequency.

Smart meters, laptops and cell phones are considered low emission devices that distance makes safer? The high speed EMF bombardment from towers, collectors, routers, etc with vulnerable people effectively in the circuit was left out of Safety Code 6.

The danger of this particular code missing a critical science mechanism is that application of law changed immediately with the mechanism found. **Stimulation of tissue is to be avoided** and the Specific **Absorption** Rate reporting a power density/sq. cm validates stimulation. Safety Code 6 says it causes nerve stimulation(EMF Trigger)

The dangers of EMFs is now lectured in medical education for education credits medical professionals require for licensing. Doctors, medical education and insurers will need to consider wireless environments stimulating the neurology of their patient in diagnosis.

## **Building Code & Fire Separations**

Blanketing areas with frequencies for ease of communication has serious ramifications on buildings and infrastructure that requires immediate attention. BC Building Code and Part 4 don't want buildings subjected to molecular earthquakes. If you aggressively vibrate or electromagnetically induce everything, engineers, education, fire services and professionals at many levels have to be informed. You will have catastrophic failures with a domino effect at several levels, even fish spawning, forest fires, severe weather.

We are surrounded by frequencies **we handle with care** whether 60 Hz for creating electricity, UV frequencies burning skin, x-ray frequencies for medical imaging, microwaves, solar radiation EMFs impacting building code, etc.

Natural EMFs like solar radiation are so important, it is addressed in building codes. Urban Heat Islands were thought to be warmer areas, we couldn't see buildings being radiated by solar EMFs. Los Angeles alone is reported to spend over 100 million a year in energy costs responding to the symptoms. High speed excitation produces heat grossly exceeding Building Code. Infrared images were taken every 60 seconds after sunrise to document solar EMF interaction. http://youtu.be/dKGHKTkqeMc

I have attached an electrical example report for Forest Industry & their insurers to avoid losses with dangerous frequency failure at 60 Hz. We wire and construct building development as well as infrastructure to keep people safe from EMFs. We run cables instead of single conductors so the 60 Hz EMFs from each conductor cancel each other out. When we don't, the expanding and collapsing EMFs from singular wires would impact anything they interact with.(see attached electrical example)

Frequencies blasting across the atmosphere to communicate with smart devices will interact with all infrastructure including industry. Electromagnetically induction and high speed vibrations penetrating concrete isn't our objective. Whether smart meters on buildings or Wi-Fi in schools, frequencies are going through walls and structures. Towers, collectors or wireless infrastructure is communicating with meters and meter banks. The frequencies are blasting buildings, everything on the way there and going through structural components as well as fire separations. 900 MHz going through walls is going to cause molecules of construction material to change direction 1.8 billion times per second. 2.4 GHz or 5 GHz in schools means 4.8 or 10 billion times per second. Would the frequencies going through refractory lined vessels affect the integrity of the vessels used in industry?

That is independent of electrical and mechanical systems or appliances being impacted. Inducing electrical wiring, vulnerable devices, appliances, pacemakers, health monitoring equipment while vibrating the equipment at high speeds is dangerous. Blasting frequencies can induce charges where a static trigger could cause a spark in volatile environments including lumber, oil, gas, grain elevators, etc, etc and endless potential.

Design Professionals including professional engineers, fire services have to be informed when a structure will be vibrated billions of times per second. Buildings subjected to frequencies have to be designed for it i.e. RF Engineer from Norad reported their buildings had grounded copper mesh to address the potential charge from frequencies.

Engineers, municipalities, building inspection, etc can't rule out the building's structure and fire separations compromised as a result of frequency interaction. Multiple smart devices under more load will increase the intensity of the molecular earthquakes caused to structures, fire separations, electrical systems, etc. Meter banks on highrises are in the basement or on the ground floor and vibrating the structure holding up the highrise.

Professionals signing off on buildings, municipalities, developers, fire services, insurers and banks haven't been informed the function of their building has changed as would liability. It brings complex liabilities forward which require clarification from the authorities having jurisdiction. If studies were completed on building and infrastructure safety, please advise ASAP. Every minute of this subtle radiation compounds problems.

We design fire separations to contain a fire and fire rated drywall changing direction 1.8 to 10 billion times **per second** with frequency exposure is going to impact fire separation integrity and perceived safety of fire fighters.

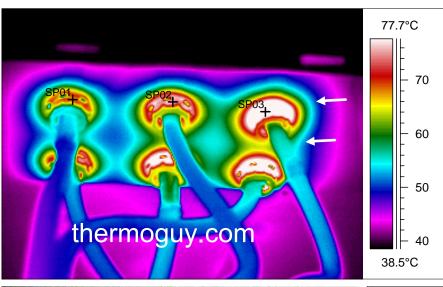
Additional information is linked for your education on this urgent issue. Please provide the appropriate response so we can address building inspections and building compliance for municipalities, professionals and insurers. Wi-Fi, smart meters and cellphones are determined to be low emissions devices that can be used 24/7. At billions of times per second, 24 hours per day and 7 days a week, how much can a structure or fire separation take before the building isn't safe?

The liabilities across the board for a technology replacing required construction include our own. Engineering and science professionals have to consult based on existing science and law. Your response as the authority and the corresponding reporting is required.

Sincerely,

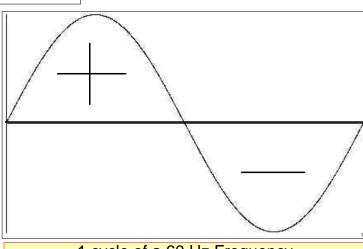
Curtis Bennett

Chief Science Officer
Interprovincial Journeyman Electrician(Red Seal)
Engineering Technologist
Adjunct Faculty, IHF & GEDI
Thermografix Consulting Corporation
<a href="https://www.thermoguy.com/urbanheat.html">www.thermoguy.com/urbanheat.html</a>
250-765-9897



IR information	Value
Date of creation	7/11/2002
Time of creation	9:03:22 AM
Label	Value
IR : max	88.3°C
IR : min	34.6°C
SP01	68.9°C
SP02	76.2°C
SP03	88.2°C





1 cycle of a 60 Hz Frequency

## Example of Extremely Low Frequency (60 Hz) Causing Electrical Failure

Infrared electrical inspections for oil, gas, energy, petrochemical, manufacturing, lumber, mines, insurers, etc are to isolate electrical problems before they fail. Failure can cause explosions, fire, injury, loss of life, production and economic losses.

The IR image above are called parallel feeds, big wires feeding a Motor Control Centre in a lumber mill. Electrical professionals accommodate the EMFs around **each** conductor using a non magnetizing insulating board. This installation didn't use the Mica board so the 60 Hz EMFs of each conductor are causing the molecules of affected metal cabinet to change direction at twice the frequency. Metal doesn't change direction easily and heat is a byproduct. The wire insulation is rated for 90 deg. C. and close to being exceeded. Breakdown in insulation would result in a groundfault and violent explosion. This is with extremely low frequencies.

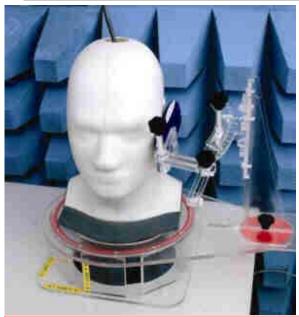
Natural frequencies like solar EMFs can cause buildings to grossly exceed building code by causing excitation of absorbent versus reflective exteriors. This is a link to a time-lapsed infrared video of solar EMFs interacting with development right after sunrise. IR images were taken every 60 seconds without expectations. http://youtu.be/dKGHKTkqeMc

Wi-Fi, smart meters or RF EMFs going through walls is causing structural components, fire separations, etc to vibrate 1.8 to 10 billion times per second. That affects building code compliance.



## Specific Absorption Rate(SAR) Update

http://www.compliance-club.com/archive/tuv/sar\_update.asp



To the left is the science that determines wireless safety. Fluid is poured in the top where a temperature probe measures heat with EMF absorbed **by cell phone only**.

The frequency from the cell towers to cell phone radiating human biological systems isn't considered.

Smart Meters are considered safer because the meter isn't against the head. <u>The frequency interactions between the meters, towers, collectors, etc electromagnetically inducing human biological systems isn't considered.</u>

Wi-Fi is considered safer because the laptop isn't held next to the head. <u>The frequency interaction between the routers and laptops electromagnetically inducing the entire classroom isn't considered.</u>

http://www.thermoguy.com/pdfs/Wi\_Fi\_Health\_Risk\_Advisory.pdf

Canada's Safety Code 6 governs the limits of human exposure to RF EMFs. These are the same science standards used by the FCC and other international bodies. Although these standards are based on decades of scientific literature, Safety Code 6 admits the mechanism linking the frequencies to adverse health effects is missing. A frequency code missing a mechanism is dangerous, the application of existing law can change as soon as the mechanism is found. "The predominant health effect to be avoided is stimulation of tissue or the heat effect." Experimental studies show it can lead to nerve and muscle stimulation.

The missing mechanism was reported by government trained electrical professionals to Health Canada and by expert witness at the request of Canadian Parliament's Standing Committee on Health. There were errors or omissions in safety standards that prevented the mechanism from being represented. The electricity, frequencies and vulnerability of biological systems to EMFs were left out. The towers, wireless infrastructure and routers smothering the planet with high speed frequencies to communicate with wireless devices were left out of the equation. Scientific standards were using an incomplete equation.

Read Safety Code 6 where you can see they negate to include the electricity of the body, voltages, frequencies or frequency interaction with intricate, very vulnerable biologic systems. No tower, infrastructure or router EMFs considered. http://www.thermoguy.com/pdfs/Safety\_Code\_6.pdf

As soon as you incorporate the electrical information, it scientifically validates the frequencies are stimulating tissue. EMF induction at high speeds adversely affects biology in many ways. Just the frequencies going through people causes high speed polarization at twice the frequencies. Impacted atoms and molecules will change direction from 1.8 billion to 10 billion times per second with smart meters or Wi-Fi. Heat is only one byproduct of this high speed EMF radiation interaction with biology. The test model above isn't showing EMF interaction. This link will demonstrate how aggressively solar EMFs can interact with building development. http://youtu.be/dKGHKTkqeMc

With the mechanism reported linking the frequencies to adverse health effects, the dangers of EMFs is lectured in medical education for continuing education credits medical professionals require for licensing. <a href="http://www.thermoguy.com/pdfs/Medical\_Education\_Letter\_on\_Wireless\_Lectured\_in\_Medical\_Academia.pdf">http://www.thermoguy.com/pdfs/Medical\_Education\_Letter\_on\_Wireless\_Lectured\_in\_Medical\_Academia.pdf</a>

Standards and testing on frequency safety address health only. Blasting the frequencies through buildings, fire separations, infrastructure, industries, wiring affects building code compliance and fire safety. Pacemakers, bees, pollinators, ecosystems have to be addressed.