

## **The Royal Society of Canada, Expert Panel on Safety Code 6 - Oct. 26, 2013**

Dr. Paul Demers, Chair of the Royal Society of Canada's Expert Panel Reviewing Safety Code 6

c/o Russel MacDonald at [admin-assistant@rsc-src.ca](mailto:admin-assistant@rsc-src.ca)

Dear Dr. Demers,

I appreciate the opportunity to provide to you, for your consideration, my comments about the current review process, my experience with Health Canada, and the effects of the current guidelines (Safety Code 6) on me, my community and my province.

This review process is of major importance to Canadians. As the wireless technology has "progressed" with new devices proliferating into every home, with multiple telecommunications transmitters in every neighbourhood, the exposure levels have increased. Yet Safety Code 6 has remained virtually unchanged since inception in 1979.

As more scientific research has shown potential for significant harm at levels far below the thermal levels acknowledged by Health Canada, Safety Code 6 has remained unchanged. The public is given inaccurate reassurances that there is no reason for concern, that no protective measures are required.

Even as prior Royal Panels have noted biological effects that could be considered dangerous, e.g. blood brain barrier leakage and DNA damage at levels far below the allowable limits, Safety Code 6 has not been amended to reflect these effects.

As recent as today, Health Canada is telling people that: (letter from Andrew M. Adams, Director General, Environmental and Radiation Health Sciences Directorate)

"The exposure limits in Safety Code 6 are based on the lowest exposure level (threshold) at which any scientifically-established, human health effect occurs."

"The limits recommended for general public exposure to RF energy are designed to provide protection for all age groups, including children, on a continuous basis. Based on a thorough review of scientific data, the Department has concluded that there is no scientific basis for the existence of any short- or long-term adverse health effects or of cumulative effects associated with RF exposure at levels below the limits outlined in Safety Code 6."

The public is never told that Safety Code 6 does not apply to the general public but rather, as stated in the Preface:

“The safety limits in this code apply to all individuals working at, or visiting, federally regulated sites.”

Neither is the public told that Safety Code 6 is based on the guidelines established by ICNIRP with and by the industry, admittedly for the protection from thermal effects alone.

Health Canada never tells the public that the World Health Organization’s panel, IARC, classified radiation from all wireless devices as a 2b (possible) human carcinogen, the same classification as lead, DDT, and HIV.

The truth is not being told to the public, and Health Canada has itself become more aligned with the industry instead of safeguarding our welfare. I have been dealing with Health Canada over concerns with RF radiation for 8 years now, as a private citizen forced to live in an environment that many independent experts consider dangerous, hence my frustration and cynicism about this process.

### **My personal background**

I live on Triangle Mountain in Colwood just west of Victoria, BC. Prior to 2000, Rogers had a small tower with a single small FM transmitter located on the top of this elevated area overlooking the city of Victoria and the Juan de Fuca Strait. Homes began to be built near the tower in 1990.

In 2000 the neighbourhood was well-settled when Rogers told the City of Colwood that it was going to repair the base of the tower to stabilize it. Instead, it removed the older tower and installed 2 taller ones and put 3 FM transmitters on them, with a total output of 140,000 watts. The towers are within 30 meters from the homes.

When the neighbours complained to Industry Canada, the response was that Rogers had made a mistake – they didn’t realize there were homes there, but it was too late. Nothing could be done. The Minister of Industry at the time, Allan Rock, asked for an investigation and tighter controls so that this would not happen again.

When health concerns were raised by the homeowners and city officials, the consistent response was and has been that so long as levels are below Safety Code 6, there are no concerns.

Before buying our lot in this area in 2002, I asked Health Canada and the City of Colwood if these things were safe – and I was assured that they met federal standards, which “are among the best in the world”. We built our home.

Within a year I learned that many of my neighbours were suffering serious health problems: breast cancers, thyroid and prostate cancers, cataracts on eyes of younger people, rashes, memory loss, night sweats and sleeping problems. One young woman

had several miscarriages while living here, and when she moved, her next pregnancy was carried to term.

I wrote many letters to Health Canada about these problems and was always told there was no evidence of harm. I took it upon myself to read as many reports as possible, and to my horror I found that Health Canada had lied to me. The evidence was there and has been for decades. All of the symptoms my friends and neighbours were suffering were consistent with the health effects reported in studies by many different scientists from many different countries. How could Health Canada not have known?

Due to lack of Industry Canada guidelines in conjunction with the high emission levels allowed by Health Canada, there now are 49 transmitters on these 2 towers – 3 FM and 46 cell. And within 500 meters of my home is another antenna farm mere meters from homes with another 60 antennae, with advertisements by the owner of the lot encouraging more, even from companies in the US.

People on Triangle Mountain, and for great distances around, are exposed to very high levels of radiation all day every day. They are suffering various symptoms consistent with scientific evidence of radiation sickness, but so long as Health Canada tells doctors, provincial health authorities and the public that there is no concern, few make the connections. Sadly, very few are taking precautionary measures or are able to move away (separate from the Panel's considerations but of major concern for us, our homes cannot be sold. As people have become more educated on the possible risks, we have become prisoners on Triangle Mountain).

### **Concerns re. current review process**

My husband and I have devoted the last 8 years of our lives to exploring the evidence that is available concerning radiofrequency radiation, attempting to raise public awareness of the health concerns and to trying to convince those in authority to implement precautionary approaches, especially for those most vulnerable – children, pregnant women, and those with pre-existing health problems.

We have found to our dismay that the industry's influence is pervasive, at all levels. Independent scientists are demeaned and results are misrepresented. Health Canada considers reports funded by the industry as credible, if not more so, than those done without industry support. No credence is given the many reports that demonstrate the old adage "he who pays the piper calls the tune". As expected, when industry pays for studies, the resultant reports overwhelmingly show no harm (70%+). The converse is true when industry does not fund research.

This influence has extended itself to the panels and agencies throughout the world, and only recently have those with conflicts of interests been forced to resign. One such person of note was Dr. Anders Alhborn. After having been on many major panels reviewing health effects from exposure to cell phones, no doubt influencing decisions, it

was learned that Dr. Alhbom had major affiliations with the wireless industry. Only after being exposed by an investigative journalist was he forced to resign from the WHO IARC panel in May, 2011.

Knowing that the tentacles of industry are pervasive, I have concerns about the independence and capability of the members of the current panel and of the review process itself.

When the review was announced and panel members selected, I was dismayed to see members who have asserted many times, on behalf of industry, there is no harm from RF radiation. According to the guidelines for selection, open-mindedness is required. It is a given that members should not have conflicts of interest or have been affiliated with the industry that would most suffer from a stricter guideline.

I wrote to Mr. Flynn, Chair of the Selection Committee several times, (emails provided upon request) with questions that I believe relevant to a transparent process.

- 1) What are the criteria used to select members of the panel?
- 2) Who does the selection?
- 3) Were there no experts in relevant fields who were not affiliated with the industry?
- 4) Who are the sponsors of this panel?
- 5) What role did the sponsors play in selection of the panel members?
- 6) Are any public-interest groups involved in the current process? If not, how might one become involved?
- 7) Who or what department selects the studies and reviews being reviewed by the panel?
- 8) What are the criteria for the selection of the material reviewed?
- 9) Would you please provide a comprehensive list of the material being reviewed?

### **Conflicts of interest**

Mr. Flynn's response was:

“As Chair of the Expert Panel Committee of the RSC I can assure you that all perceived conflicts of interest were examined in great detail and that those whom you perceive to be too closely allied with the RF industry, both now and in the past, will address the issue of SC6 with impartiality

and from a fresh perspective, irrespective of past statements or judgements.”

This was before Dr. Krewski’s conflict of interest was made public, leading to his resignation. If the “perceived conflicts of interest” had been examined so carefully in advance, why was Dr. Krewski given the position of Chair of the panel to begin with? Why was it up to the public to force his withdrawal?

How can Mr.Flynn, and why should I, be assured that those who have been allied with the RF industry will address the issue impartially and with a fresh perspective, especially when the same views have been held and expressed repeatedly over the years?

There are other members of the current panel who have industry relationships which are bothersome. Both Dr. Moulder and Dr. Foster have supported telecommunications companies.

As reported in Microwave News: "John Moulder, a professor at the Medical College of Wisconsin in Milwaukee, has a lucrative consulting practice on EMFs and health. Over the years, Moulder has earned hundreds of thousands of dollars disputing the existence of adverse EMF health effects, even those accepted by most other members of the EMF community." <http://microwavenews.com/RR.html>

According to his [CV](#) he has been a consultant for Minnesota Power Company, Wisconsin Public Service Corporation, Bermuda Digital Communications, Australian Mobile Telecommunications Association to name a few.

As C4ST has written, “Dr. Moulder has acted as a professional witness on behalf of companies fighting claims that employees were injured by RF radiation.” On numerous occasions he has discounted many independent scientific studies that show harmful effects.

The fact that he has a long-held, publicly-expressed opinion runs counter to the protocol of the Royal Review Panel which demands that members be unbiased and open-minded. His inclusion on this panel threatens its credibility.

In 2007 Dr. Kenneth Foster authored a study on Wi-Fi exposure supported and funded by the WiFi Alliance. ( Foster KR, [Radiofrequency exposure from wireless LANs utilizing Wi-Fi technology](#). Health Phys. 92:280-9, 2007). The WiFi Alliance identifies itself as follows:

“In 1999 several visionary leaders came together to form a global non-profit organization with the goal of driving adoption of high-speed wireless local area networking. We are that organization”. <http://www.wi-fi.org/about/organization> The members of this organization are the very companies that would suffer financially from

any acknowledgement that their products are harmful, or from stricter guidelines.  
<http://www.wi-fi.org/about/member-companies>

In 1987, in a commentary in the British Scientific Journal Nature 91987. Vo. 330 “Microwaves: the risks of risk research”, Dr. Foster called for an end to research on risks associated with microwave radiation.

Why are people with long histories of affiliation with the industry, with stated opinions that indicate lack of willingness to consider other points of view, allowed to decide the guidelines that affect every member of the Canadian public? When I asked this question I was told that it was difficult to find qualified people who do not have a history of being associated with the industry.

This is an unacceptable justification for the current make-up of the panel. There are dozens of independent experts in relevant fields who could have been chosen if the will had been there. If the decision reached by these members is to be credible, but more important correct and one that will benefit the health and welfare of Canadians, it is imperative that **all** members be free of conflicts of interest, **be expert in relevant fields**, and be dedicated to making the best decision possible – not the one that will get them more jobs or bolster their university grants.

### **Criteria for panel selection**

The criteria for panel members is not clear. No definition is provided for an “expert”, and neither is it stated that a member must have education, training and experience in a relevant field. When asked to define an expert in the context of this panel, Mr. Flynn wrote in a May 3 email:

“For the purpose of review of Safety Code 6 (independent expert); an independent expert is considered to be a person who has special skill, training and/or knowledge in a particular field who is appointed by an independent self-governing body (such as the Royal Society of Canada).”

In essence, an expert becomes an expert by virtue of being appointed to this panel.

I would like to know why some who have no background on bio-engineering, medicine, non-ionizing radiation or any relevant area are included.

One member, Dr. Anne-Marie Nicol, has training in communications:

“Anne-Marie’s research focuses on the communication of complex scientific and public health information to a range of audiences...”

Anne-Marie’s research includes both qualitative and quantitative methods and is often intervention based. She has designed a number of innovative public and occupational health awareness campaigns including Wash with

Care, a Bollywood themed pesticide exposure program and the Tick Talk, a multi-lingual tick education program for children on ticks. Anne-Marie is also the current Principal Investigator of the CAREX Canada project, Canada's only national carcinogen surveillance program. At CAREX, Anne-Marie's focus is on translating knowledge about occupational and environmental carcinogens to policy makers and cancer prevention stakeholders across the country."

She may be well-qualified in writing a report and making complex ideas understandable by the public, but how is she qualified to be on a panel responsible for reviewing the exposure limits of radiofrequency radiation? Why weren't experts such as Dr. Sam Milham and Dariusz Leszczynski invited instead of a communications expert? If someone like Dr. Nicol is needed to write the revised Safety Code 6, this person should participate after the decision is made, not during the process.

### **Sponsor and the role of the sponsor**

Mr. Flynn advised that Health Canada was the sponsor of the review but when I asked for its role, I received little information.

When a Freedom of Information request resulted in a response, major sections were redacted. The basis of the review, the guidelines being suggested, even the recommendations for members were blackened out.

Most telling were the instructions that no information regarding the studies and reviews that were to be used should be provided outside the panel.

It this process is to be transparent, why the redaction of basic information? Why should the public not know what scientific information forms the basis for the decision?

### **Funding and public involvement**

Part of the information included in the FOI document was the funding for this panel. The total allotted is approximately \$100,000. This compares with a payment made to Dr. Krewski of \$125,000 for a report commissioned by Industry Canada to support the wireless industry. In my humble opinion, the comparison indicates where the government is placing its support, and as a member of the tax-paying public I protest.

Why was there not enough money to allow for public meetings across Canada to allow the many people who are concerned about the lack of control of the proliferation of wireless technology to participate?

The Royal Panel that is reviewing libraries is holding public meetings in 7 major centres across Canada. The Panel reviewing RF radiation and Safety Code 6 is holding one.

This incongruity suggests that the power of industry is holding strong control over the process which is reviewing this guideline.

### **How Safety Code 6 affects my community**

Even though Safety Code 6 is not a law and states that provincial agencies are free to set their own standards, provincial authorities use Health Canada as a touchstone, and this should be appropriate and proper. Health Canada's job is to advise local authorities on risks, and to be protective of the public. Sadly, Health Canada is falling short of its responsibilities.

In British Columbia our provincial medical officer, Dr. Perry Kendall, is a public health doctor. He has no training in or expertise concerning microwave radiation, so he is relying on the adequacy of Safety Code 6. Just as Health Canada says on its website and in letters, Dr. Kendall advises the public, teachers, school boards, the utility companies and the government that there is no evidence of harm from exposure at levels allowed by Safety Code 6. He doesn't know that Safety Code 6 does not take into account peak exposures over prolonged periods of time. He hasn't been told by Health Canada that there are no studies showing that radiation from wireless devices is safe, and that the onus rests with us to prove it is unsafe. He doesn't understand that the industry has a grasp on most agencies resulting in guidelines that are not protective, especially for children. And neither is he aware that Safety Code 6 applies to heating effects only, and is not protective of biological effects.

As a result Dr. Kendall is encouraging the proliferation of WiFi in schools, resulting in children being exposed to powerful router emissions several hours per day throughout the school year. Children are suffering health problems as they develop electro-sensitivity. Many parents are unaware of the symptoms, and doctors are at a loss to explain nosebleeds, migraines, inability to sleep, agitation and behavioral problems, and even heart problems ranging from palpitations to cardiac arrests – IN CHILDREN!!

As parents are becoming educated, some are having to withdraw their children from their schools, either home teaching or searching for the few schools still using wired internet. When children are removed from this WiFi environment, their symptoms abate and they regain their good health.

Also out of ignorance, Dr. Kendall, like other provincial health officers, is allowing the wireless smart grid to be implemented without limitation. Wireless smart meters with multiple transmitters that emit thousands of signals each day are being put on homes, often inches from a child's bed. Collector antennae with up to 8 transmitters are being put on hydro poles just feet outside bedroom windows. And cell transmitters are being installed in every neighbourhood to support wireless transmissions of data.

I personally receive on average 300 emails a day from people, many desperate for help with children suffering after smart meters have been installed, or after having health



conditions exacerbated when a telecommunications company installs a cell transmitter on the roof of their apartment building.

Even though this microwave radiation has been known for decades to cause serious biological and health effects, thanks to a lack of regulations and failure of Health Canada to implement biologically based guidelines, we are now living with levels of radiation billions of times higher than those that existed throughout evolution. There is no escape, even for those who are most sensitive.

I have been working for 3 years to educate people about the serious effects from the wireless transmitters that are being put on homes, and, despite petitions signed by more than 30,000 British Columbians asking for a moratorium until the safety of the smart meters can be assured, the program continues. Why? Because Health Canada says there is nothing to worry about.

### **Requests for action:**

In summary, I would like to state that I have major concerns about the process by which this panel was formed and by which the review is being conducted. There is no transparency and the results will not be credible.

A new panel, one comprised of independent experts in the fields of bio-engineering, medicine, environmental medicine and epidemiology should be created. The panel should not be given directives by Health Canada, but rather should be free to establish a biologically-based guideline.

An independent body is needed to review Health Canada, its mandates and any possible conflicts of interests within the agency. In 2008 my husband and I submitted a 25 page petition to the Auditor General charging Health Canada and some of its senior members with conflicts of interest, with working for the telecommunications industry instead of for the public (#250). No one at the agency refuted these charges. Health Canada has become too closely aligned with the industry to be able to provide objective assessments of the products being sold to the public, thereby allowing dangerous devices to be forced into our homes and neighbourhoods.

Health Canada has many questions to answer, among them:

Why has the directive given by HESA in 2010 to establish a registry of all brain tumours been ignored?

Why did they instruct the Panel to not make public the list of studies being reviewed?

Why do they deceive the public by saying there is no convincing evidence of harm and that Safety Code 6 is among the strictest guidelines in the world?

Why does it disregard the recommendations of its own RSC Panel about the evidence of dangerous biological effects, as it did in 1999?

With the growing number of people exposed to high levels of RF radiation, and with the increasing number of people exhibiting symptoms of electro-sensitivity, a registry of EHS sufferers should be established. Funds should be made available for independent research that should include replication of studies that have been conducted. Some of these include Dr. Magda Havas's demonstration that a significant proportion of the population experience tachycardia when exposed to particular frequencies, e.g. from DECT phone or wifi modem. A second study showed live blood exhibiting rouleaux formation after short term exposure to an active cell phone. This type of research would confirm the existence of EHS and aid in its diagnosis, providing a major step forward in understanding biological and health effects suffered by millions of Canadians.

Dr. Demers, the situation is dire, especially for our children. They are being exposed before birth and throughout childhood – at home, at school, even in parks as they play. There is no proof that this radiation is safe, and much that it isn't.

While there are thousands of studies showing harm, there are individuals on the Royal Panel as currently comprised who will discount them, saying the studies are inconsistent, that for every independent, peer-reviewed, credible study showing harm there are more industry-funded ones showing no harm. They will use the "weight of evidence" argument to perpetuate the notion that there is no consistent evidence of harm, attempting to say one cancels out the other. But weight of evidence as used to support the status quo does not apply when we're talking about health and safety. If there is any evidence of harm from a credible scientific source, it cannot be ignored and the precautionary principle must apply.

I ask you, Sir, if something is truly safe, would there be any studies showing harm?

Respectfully submitted,  
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