

Radio Frequency Readings on Triangle Mt., Colwood, BC, June 25, 2008.

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On June 25, 2008, the Citizens Against UnSafe Emissions (CAUSE) with the help of federal MP Dr. Keith Martin, hosted a *Public Forum on Cell/Transmission Towers* in the City of Colwood, Vancouver Island, BC. I was invited to attend and to give a presentation. Dr. Martin Blank also attended the meeting, gave a short presentation and answered questions. He is one of the authors of the Bioinitiative Report (2007), which is requesting that guidelines for radio frequency radiation be based on biological effects rather than thermal effects, as outlined in Safety Code 6.

The evening consisted largely of Q&A with approximately 180 people in attendance. Gary Paugh, an Industry Canada representative, attended the meeting but left as soon as the questions began, which is unfortunate since citizens wanted to ask him questions. No one came from Health Canada, despite being invited.

The day of the *Public Forum* I met Sharon and Dennis Noble, who were the ones who invited me to come to their Colwood community. As I drove to their lovely home, which sits on top of Triangle Mountain, the first thing I noticed was the size of the towers and the large number of antennas. Towers with broadcast antennas are within 30 meters of the nearest home and there are nearby towers with cell phone antennas perched on top. These towers loom above the community.

A nearby hill, Mt. MacDonald, about 3-4 km away from this community with no homes immediately around it, would be a much wiser location for these towers. In a letter to the Mayor of the City of Colwood, dated May 16, 2005, David L. Emerson, Minister of Industry, acknowledges that the MacDonald site would be technically suitable but that the move would cost approximately \$3 million dollars! He recommends that the City of Colwood negotiate the cost of the move with the broadcaster.

In 2001, Industry Canada did a survey of the neighbourhood and their highest reading was 115 microW/cm²! Very convenient with the guideline at 200 for the low MHz range for TV broadcasting. These readings were not taken in the manner stipulated by Industry Canada, and as such are flawed.

I took out my Electrosmog meter and began to take measurements in the Noble home and then in their neighbour's homes, as well as along the street. All readings were taken between 4 and 5 pm on June 25, 2008. The Electrosmog meter covers the frequency range

between 30 MHz to 3.5 GHz. I set it to maximum power density and we walked around the property, both inside and out.

The ambient exposure in these homes was much higher than measurements I have done in other communities and several homes had “hot spots”, very high, localized levels of radiation. These hot spots were NOT associated with wireless routers or cordless phones within the homes.

The highest reading was in the Noble home at 455 microW/cm². Not surprisingly, this home was also at the highest elevation. The homes at lower elevations had slightly lower peak values (see Table 1 and Figure 1).

Table 1. Maximum power density readings on Triangle Mountain and at Wishart Elementary School, taken on June 25, 2008. The locations are listed by decreasing elevation.

Location:	Bexhill Place	Maximum Power Density (microW/cm ²)
818	(~100-150 m from tower)	455
814		275
811	(~35 m from tower)	175-288
801		145
800		142
Wishart Elementary School	(~1.2 km)	8



Figure 1. Satellite photograph of Triangle Mt with maximum power density readings at various homes taken on June 25, 2008 (google map).

The Safety Code 6 guideline for frequencies in the low MHz part of the electromagnetic spectrum is 200 microW/cm^2 . This is a 6-minute average and what I measured was the maximum or peak value. “Maximum” readings make more sense than “average” readings as a safety guideline for human health. The peak readings were much higher than the 200 microW/cm^2 guideline in several homes and also along the street (Figure 1).

Sharon Noble pointed out each of her neighbour’s homes and told me what illness they were suffering from including numerous cases of cancers, sleeping problems, skin problems, one young man in his 40s had cataracts (which are known to be caused by microwave radiation), miscarriages, tinnitus, 4 pets in one home died of cancer within a few months. What we have here is a community in a lovely location, with beautiful homes, and a lot of very sick people and pets. Something is wrong!

The Nobles also asked me to measure the power density at Wishart Elementary School, which we did around 6:30 pm (just prior to the *Forum*). This school is approximately 1.2 km from the antennas (as the crow flies) (see Figure 2). Readings were taken behind the school, in the schoolyard, with the towers in full view. Maximum reading was 8 microW/cm^2 . This is a much more reasonable level but it still exceeds the Salzburg Guidelines (0.1 microW/cm^2) and is just under the Russian guideline (10 microW/cm^2). These two guidelines are much more protective than the Safety Code 6 guideline we have in Canada (200 microW/cm^2) for the same frequencies.

This discrepancy in the guidelines (4 orders of magnitude) does not make sense since Canadians are not any more tolerate of these frequencies than are Russians or Austrians! Clearly our government believes we require less protection than do governments in other countries.

A: Broadcast Antennas on Triangle Mtn.

B: Wishart Elementary School
 8 microW/cm^2 in school yard

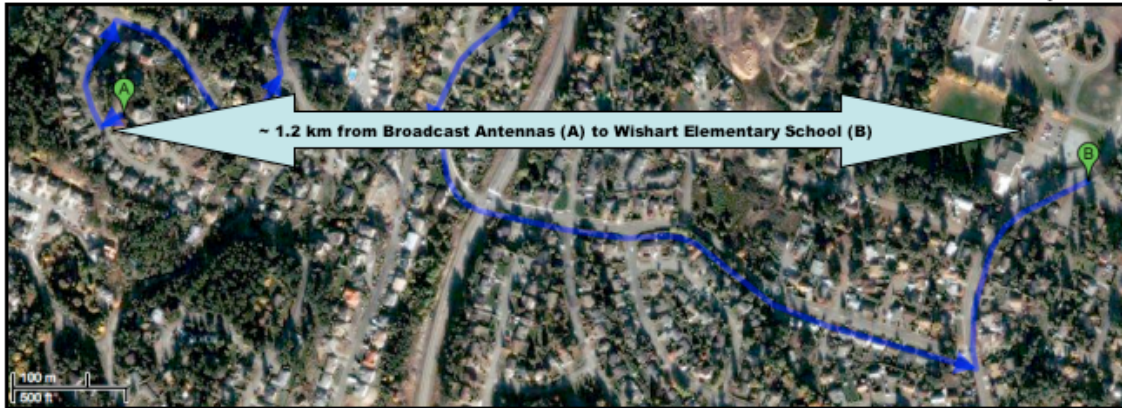


Figure 2. Satellite photograph of City of Colwood showing Triangle Mt and Wishart Elementary School (google map).

In addition to the health concerns there is **electromagnetic interference (EMI)** from the antennas. People are unable to use their remote controls for opening and closing garage doors and locking their cars. I witness this interference on June 25th. The Nobles had to

physically close their garage door since their remote control did not work. The garage door of one neighbour opens and closes randomly. Another neighbour has an electric bed that goes up and down on its own. Another has a gas fireplace that will suddenly turn on even when the thermostat is turned off. People have interference on their telephone lines, often hearing music and having to prematurely end telephone calls. A few years ago the Nobles purchased a new VCR (video cassette recorder) for recording TV programs and they had so much static they couldn't use it. Industry Canada told them to purchase a DVR (digital video recorder) instead. This type of advice is irresponsible and fails to deal with the EMI problem. While EMI is trivial with respect to health, it is yet another issue that Industry Canada, despite its many assurances, has failed to successfully address for the people in this community.

We have a serious environmental health problem on Triangle Mountain and I suspect it relates directly to the radiation coming from the antennas. To determine if this is indeed the case, we would urgently need someone to do an epidemiological study. We also need independent monitoring done since I expect that the guidelines are exceeded in various locations based on the limited testing I did. This would be a sensible course of action but it will take time (possibly years) to conduct a proper study and, in the meantime, the residence of Triangle Mountain will continue to be exposed to this radiation. A more prudent precautionary approach would be to move the antennas to the MacDonald site, which has been deemed suitable. The longer this move is delayed the more lives that are put at risk.

The next question is "Who should pay the cost of relocating the antennas"? I would humbly suggest that the **cost** be borne by those who **benefit financially** from the towers and those who approved the decision to locate the towers in this community (Industry Canada and the Broadcaster). Asking the City of Colwood to pay for this move is ludicrous since the people in this community have already paid a serious price by having their health compromised. Placing the financial burden on Industry Canada and on the Broadcaster would ensure that similar decisions to locate antennas near populated areas be made more carefully than they have been in the past.

It is my sincere hope that Dr. Keith Martin and others in positions of authority demonstrate leadership in this area, that they put the health of the people of Triangle Mountain as their top priority, and that they resolve this issue by relocating the antennas. Failure to act is an irresponsible option.
