

(speech)

Good evening His Worship. Good evening Councillors. I'm speaking to the agenda item of Telecommunications Towers Protocol, specifically about health concerns.

I understand that it would seem very natural to consult the Health Department, but with this particular issue, please keep in mind that there is a conflict of interest. Vancouver Coastal Health has leased the roof-tops of many of their properties for - telecommunications antennas. This includes hospitals and residential care facilities. This refers to antennas set up for commercial use, not for medical use. Because of that, I sincerely hope that you, Councillors, will look at the research with an open mind, and evaluate independently.

Scientific studies on the health effects of cell phone towers and radio towers have been conducted around the world. They reported more severe health effects like cancers, irreversible infertility, as well as other daily problems such as insomnia, headaches, difficulty in concentration and depression.

In 2002, an empirical study in Germany which followed the medical record of 1000 patients over 10 years, reported that the risk of developing cancer for those living within 400 meters of the cell tower compared to those living outside, was three times as high and "the patients fell ill at least 8 years earlier."

In 2004, another study in Israel showed a 4-fold increase in cancer within 350 meters of a cell tower compared with the general population of Israel, and a 10-fold increase specifically among women.

Another large-scale study published in 2006 investigated the cancer cases among the 2.2 million population of the city of Bela Horizonte in Brazil. This study showed "the existence of a spatial correlation between cases of death by neoplasia and the locations of the Base Stations." (neoplasia is another word for tumours)

In 2010, an important study in India was conducted for the Department of Telecommunications regarding the cancer clusters found in residential homes close to cellphone towers. That study started to raise awareness across the country. About 5 weeks ago, in Gurgaon, a large financial and industrial centre in India, its municipal government voted unanimously to shut down 298 cellphone towers in residential areas, citing health hazards.

As for infertility, Studies have been done on birds, chicken, insects, frogs, rats and human sperms showing statistically significant results of infertility. Abnormal births and behaviours were also observed.

I have submitted the cell towers map previously. Each of these triangles represents 1 carrier, but for the actual number of antennas, you'll need to multiply by 3 to 6. These are only commercial licensees. Other antennas used by the city, the fire dept, fisheries or health departments are not included. Today I'm also submitting a map of the proposed BC Hydro smart meters collection antennas. This will add another 29 locations which are imposed on us.

Added to above are the multiple Wi-Fi networks in public buildings, in schools, in work places and homes. At no point in history has the whole population been subject to this high level of man-made, pulsed microwave radiation. Unlike cellphones which send signals mostly during talk or downloading times, telecommunications towers emit radiation ALL day long. They don't stop, and there's no way for

From : Michelle Khong
To : MayorandCouncillors@richmond.ca, cityclerk@richmond.ca
Date : Thu, Feb 9, 2012 at 2:08 PM
Subject : Celltower map added: Feedback: Telecommunication Antenna Consultation and Siting Protocolmailed-bygmail.com

His Worship Brodie and City Councillors,

My last email of Feb 6 cited scientific studies on and international warnings calling for precaution on cellular microwave radiofrequency radiation, as well as requested that City Council considers new cellphone towers be set up no closer than 305 meters from residential homes and schools.

I understand that the above suggestion would put some limitation on future siting of cellphone towers. However, maybe we should start considering how many more cell towers do we actually need. I have attached a cell phone tower map of what is already installed in Greater Vancouver including Richmond. Please note that each triangle represents ONE cellular CARRIER, but each carrier usually sets up at least 4 antennas at the site (sometimes 6-8) to cover the various angles. (*Note: These are only commercial cell towers, excluding radio towers as well antennas set up for public services by the City, the Fire Department and Health Department etc.*)

At no point in history have our population been exposed to this high of level of man-made, modulated/pulsed microwave radiation. Unlike cellphones which send signals mostly during talk or download times, cell towers/base-stations emit signals ALL day long - over 900,000,000 (900 million) cycles of microwave frequency PER SECOND. They don't stop. On top of that, there are millions of Wi-Fi routers in public and private places, even schools. BC Hydro is now putting wireless smart meters in every home (*see smart meters collection antenna map*). If we continue the culture of blindly allowing more and more electromagnetic radiation in our environment with zero restraint and zero precaution, we are really putting our health, especially our children's health, under incalculable risk.

At the 2010 Canadian Parliamentary committee hearing on Health Impacts of Microwave, Dr. Annie Sasco testified, "If we want to wait for final proof, at least in terms of cancer, it may still take 20 years and the issue will become that **we will not have unexposed population to act as control... But we have enough data to go ahead with a Precautionary Principle to avoid exposures which are unnecessary if our goal is to reduce somewhat the burden of cancer in the years to come, and other chronic diseases.**"

Annie J. Sasco, MD PhD: Two Masters and a Doctoral degree in Epidemiology from Harvard University. Teaching fellow of Harvard University. Director of Epidemiology for Cancer Prevention in an Inserm (NIH) research unit, School of Public Health of the Victor Segalen Bordeaux 2 University in France. Training at the Bordeaux Medical School. 22 years at the International Agency for Research on Cancer (IARC) in Lyon, France, including 9 years as Group Leader and then Unit Chief of Epidemiology for Cancer Prevention and 2 years as Acting Chief of the Cancer Control Programme of the World Health Organization (WHO).

Thank you for your attention.

Michelle Khong

P.S. Cell phone tower map sources: http://www.ertyu.org/steven_nikkel/cancellsites.html
Cell tower search also available here:
http://sd.ic.gc.ca/pls/engdoc_anon/web_search_geographical_input

From : Michelle Khong
To : MayorandCouncillors@richmond.ca, cityclerk@richmond.ca
Date : Mon, Feb 6, 2012 at 2:27 PM
Subject : Feedback: Telecommunication Antenna Consultation and Siting Protocol

His Worship Brodie and City Councillors,

I understand that City Council is proposing to adopt the Telecommunication Antenna Consultation and Siting Protocol at the Planning Committee on Tuesday, February 7, 2012 - 4:00 p.m.

Please incorporate the concern on long-term health of residents into the new protocol. As you can see from the scientific studies, cancer rates within 400/500 meters from cell phone antennae are 3-4+ TIMES more than in areas exceeding this distance. Children, babies, pregnant women, the elderly and medically challenged are all more susceptible.

Also, 50 meters of consultation base for <15 meter cell towers is completely inadequate. In fact, because of their closer distance to ground level, their impact is significant.

I would like to request that Richmond City Council reference Vancouver School Board's decision in keeping Telecommunication Antenna 305 meters (1000 feet) from schools and residential buildings. (Please see the documents attached below for your reference).

Thanks and regards,
Michelle Khong

(Feb 2005) Vancouver Board of Education:

6 (b) (i) Cellular Towers Motion

Moved by K. Millsip, seconded by A. Blakey, that no further installations of cellular antenna be permitted on any school building or school grounds regularly used by students; and THAT VSB policy, KMG A: Incompatible Land Uses Near Schools, be amended to include any installation of cellular antenna within 305M (1,000 feet) of a school as an incompatible use and that the Board be so notified of any potential installation.

Speaking in support of the motion, some trustees noted that:

- research has been done on this item prior to it being thoroughly discussed at previous meetings;
- although the research is not definitive on the possible negative effects of electro-magnetism on human physiology, due to the standard of diligence that the Board must assume in protecting students, it is only prudent to support the motion;
- there should be global caution exercised on the effects of electromagnetism, until it is conclusively proven to be harmless; and
- in the past, little consideration was given to the potential and cumulative ill effects of other products such as coal dust, asbestos or tobacco products, and the passage of time has shown that that lack of consideration has been a mistake.

A vote was taken on the motion, and it was declared CARRIED

http://www.vws.org/documents/VancouverSchoolBoardmotion_000.pdf

http://www.vws.org/documents/VancouverSchoolBoardmotion_000.pdf

(2003) British Columbia Confederation of Parent Advisory Councils (BCCPAC)

2003.7 Prohibiting the Sitting of Cellular Phone Masts or Antennae on School Buildings and School Grounds

That BCCPAC urge school boards and municipal governments to prohibit the siting of cell or mobile phone masts aka antennae in any areas regularly used by students such as school buildings and school grounds.

Here are some latest articles on electromagnetic radiation:

(Jan 2012) Dr. Andrew Goldsworthy, BSc, PhD
Honorary Lecturer, Imperial College London
Scientific Advisor, European Space Agency
Scientific Advisor, Bio Electromagnetic Research Initiative
Scientific Advisor, The Radiation Research Trust:

"The chilling possibility to emerge from this is that the biological effects of electromagnetic fields can be transmitted in the bloodstream 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 in the body is safe from the effects of the radiation. No part of the body should be exposed to it."

<http://www.safeinschool.org/2012/01/2012-expert-witness-testimonies-to-us.html>

(Aug 2011) Robert A Baan PhD, The IARC Monographs IARC, The W.H.O.:

"the classification 2B, possibly carcinogenic, holds for all types of radiation within the radiofrequency part of the electromagnetic spectrum, including the radiation emitted by base-station antennas, radio/TV towers, radar, Wi-Fi, smart meters, etc. "

<http://www.scribd.com/doc/79928679/The-WHO-IARC-Listing-of-RFR-as-a-Possible-Human-Carcinogen>

(Oct 2011) Health Canada:

"The department also encourages parents to reduce their children's RF exposure from cell phones since children are typically more sensitive to a variety of environmental agents. As well, there is currently a lack of scientific information regarding the potential health impacts of cell phones on children."

http://www.hc-sc.gc.ca/ahc-asc/media/advisories-avis/_2011/2011_131-eng.php

(Jan 2012) The Board of the American Academy of Environmental Medicine:

"...based on a scientific assessment of the current medical literature. Chronic exposure to wireless radiofrequency radiation is a preventable environmental hazard that is sufficiently well documented to warrant immediate preventative public health action."

<http://aaemonline.org/images/CaliforniaPublicUtilitiesCommission.pdf>

(Feb 2012) John Wargo, Ph.D., Professor of Environmental Risk and Policy, Yale University:

"The scientific evidence is sufficiently robust showing that cellular devices pose significant health risks to children and pregnant women. The weight of the evidence supports stronger precautionary regulation by the federal government. The cellular industry should take immediate steps to reduce emission of electromagnetic radiation (EMR) from phones and avoid marketing their products to children."

<http://www.ehhi.org/cellphones/>

Please note that cell tower, cell antenna, base station and cell phone mast all refer to the same thing.

Studies on Biological Effects from Cell Phone Towers (pulsed Microwave Radiation round the clock)

Mortality by neoplasia and cellular telephone base stations in the Belo Horizonte municipality, Minas Gerais state, Brazil

"complaints (insomnia, headaches, difficulty in concentration, discomfort) were greater at locations where the power density was higher, inside the 150 m range."

"The analysis showed that the number of newly developed cancer cases was significantly higher among those patients who had lived at distances within 400 m of the BS (base station) site, compared to the number of subjects who had lived beyond 400 m in the same period of time. The former subjects became sick eight years earlier, on average, than the latter subjects. The BS came into operation in 1993. From 1999 to 2004, that is, after five years' operation of the transmitting installation, the relative risk of suffering

from cancer was three times higher for the subjects living within 400 m of the BS, compared to the dwellers beyond that distance. This study represents a milestone in the field because its results clearly demonstrate that the radiation from the BS may contribute to an increase in the clinical manifestation of the disease and the general development of cancer, even at exposure levels several orders of magnitude lower than the limits of the current guidelines. Wolf and Wolf (2004) led a study in the town of Netanya, Israel, which showed an increase of 4.15 times in cancer incidence among subjects living within 350 m of the BS, compared to those who had lived further away."

"This research showed the existence of a spatial correlation between cases of death by neoplasia and the locations of the BSs, in the Belo Horizonte municipality from 1996 to 2006. The mortality rates and the relative risk were higher for the residents inside a radius of 500 m from the BS, compared to the average mortality rate of the entire city, and a decreased dose – response gradient was observed for residents who lived farther away from the BS. The major antenna concentration was located in the Central-Southern." [https://docs.google.com/open?](https://docs.google.com/open?id=1eczcCH_YWstPygXtgAzZbrUcCe7zbtgxu2R7CSUd2Eqkz2o0O8FciLzqVJ-t)

[id=1eczcCH_YWstPygXtgAzZbrUcCe7zbtgxu2R7CSUd2Eqkz2o0O8FciLzqVJ-t](https://docs.google.com/open?id=1eczcCH_YWstPygXtgAzZbrUcCe7zbtgxu2R7CSUd2Eqkz2o0O8FciLzqVJ-t)

Report on Cell Tower Radiation

Department of Telecommunication, Delhi, India

Prepared by Prof. Girish Kumar gkumar@ee.iitb.ac

Electrical Engineering Department IIT Bombay, Powai, Mumai – 400 076 - December 2010

Conclusion: "The seriousness of the health hazards due to radiation from the cell phones and cell towers has not been realized among the common man. Cell operators continue to claim that there are no health issues. Even organizations like WHO, ICNIRP, FCC, etc. have not recommended stricter safe radiation guidelines, whereas several countries have adopted radiation norms, which are 1/100th to 1/1000th of these values based on their studies. Cell phone industry is becoming another cigarette industry, which kept claiming that smoking is not harmful and now there are millions of people around

the world who have suffered from smoking. In fact, cell phone/tower radiation is worse than smoking; as one cannot see it or smell it, and its effect on health is noted after a long period of exposure.... Unfortunately, ignorance and non-awareness adds to this misery and all of us are absorbing this slow poison unknowingly. Even if people are aware of the radiation hazard, they may not have the choice to move away from it if the tower is installed near their office or residential building. In addition to the continuous radiation from cell towers, there is radiation from cell phones, wireless phones, computers, laptops, TV towers, FM towers, AM towers, microwave ovens, etc. We are exposed to all these radiations which are additive in nature. Hence, it is imperative that stricter radiation norms must be enforced by the policy makers... If people in the mobile companies think there is no health hazard, then let them stand in front of their own transmitting tower at 1m distance in the main beam for 6 hours – are they willing to take the risk? Similar effect will be there at 10m distance in about 600 hours (25 days). If mobile companies accept that radiation causes serious health problems... then researchers/technocrats/entrepreneurs will come out with possible solutions, which may be expensive but that cannot be greater than the health risk faced by humans, birds, animals and environment." <http://tinyurl.com/3tc8nt6>

The Influence of Being Physically Near to a Cell Phone Transmission Mast on the Incidence of Cancer.

Horst Eger, Klaus Uwe Hagen, Birgitt Lucas, Peter Vogel, Helmut Voit (April 2004). Umwelt Medizin Gesellschaft 17

"... the risk of developing cancer for those living within 400 metres of the mast (cell phone tower) in comparison to those living outside this area, was three times as high" and "the patients fell ill at least 8 years earlier."

<http://www.scribd.com/doc/46020865/The-Influence-of-Being-Physically-Near-to-a-Cell-Phone-Transmission-Mast-on-the-Incidence-of-Cancer>

http://www.powerwatch.org.uk/news/20041118_naila.asp0

Mobile Phone Mast Effects on Common Frog (*Rana temporaria*) Tadpoles: The City Turned into a Laboratory

"In the exposed group, low coordination of movements, an asynchronous growth, resulting in both big and small tadpoles, and a high mortality (90%) was observed. Regarding the control group (n ¼ 70) under the

same conditions but inside a Faraday cage, the coordination of movements was normal, the development was synchronous, and a mortality of 4.2% was obtained."

http://citizensforsafetechnology.org/uploads/balmori_city_as_lab1.pdf

Analyzing The Health Impacts Of Modern Telecommunications Microwaves

"The present set of experiments (a more detailed description can be found in Panagopoulos et al. 2010) showed that, the bioactivity of GSM radiation in regards to short-term exposures is evident for radiation intensities down to 1 $\mu\text{W}/\text{cm}^2$. This value of radiation intensity is encountered at about 1 m distance from a cell-phone or about 100 m distance from a corresponding base station antenna... It is possible for long-term exposure durations (weeks-months-years) that the effect would be evident at even longer distances/smaller intensities."

"The bioactivity "windows" found in our experiments, could possibly correlate with recent results of another experimental group reporting that GSM radiation caused increased permeability of the blood-brain barrier in rat nerve cells and the strongest effect was produced by the lowest SAR values which correspond to the weakest radiation intensity, (Eberhardt et al 2008)."

"The effect of cell death induction in the developing eggs of the exposed female insects, just like the corresponding effect on the reproductive capacity... evident for distances up to 100 cm (radiation intensities down to 1 $\mu\text{W}/\text{cm}^2$)."

<http://www.citizensforsafetechnology.org/uploads/scribd/Panagopoulos-Nova-2011-Adv%20Med%20Biol-review-chapter.pdf>

Neurobehavioral effects among inhabitants around mobile phone base stations. Neurotoxicology. 28(2):434-40 Abdel-Rassoul G, El-Fateh OA, Salem MA, Michael A, Farahat F, El-Batanouny M, Salem E (March 2007).

"Inhabitants living nearby mobile phone base stations are at risk for developing neuropsychiatric problems and some changes in the performance of neurobehavioral functions either by facilitation or inhibition. So, revision of standard guidelines for public exposure to RER from mobile phone base station antennas and using of NBTB (neurobehavioral test battery) for regular assessment and early detection of biological effects among inhabitants around the stations are recommended."

<http://www.ncbi.nlm.nih.gov/pubmed/16962663>

GSM base station electromagnetic radiation and oxidative stress in rats.

Electromagn Biol Med. ;25(3):177-88 Yurekli AI, Ozkan M, Kalkan T, Saybasili H, Tuncel H, Atukeren P, Gumustas K, Seker S (2006).

"When EM fields at a power density of 3.67 W/m² (specific absorption rate = 11.3 mW/kg), which is well below current exposure limits, were applied, MDA (malondialdehyde - a marker for oxidative stress) level was found to increase and GSH (reduced glutathione, a major antioxidant) concentration was found to decrease significantly ($p < 0.0001$). Additionally, there was a less significant ($p = 0.0190$) increase in SOD (superoxide dismutase) activity (cell-repair) under EM exposure."

<http://www.ncbi.nlm.nih.gov/pubmed/16954120>

Risk Evaluation of Potential Environmental Hazards From Low Frequency Electromagnetic Field Exposure Using Sensitive in vitro Methods. EU Programme.

"Quality of Life and Management of Living Resources" - [View Foreword and Download Report]

"Genotoxic effects and a modified expression of numerous genes and proteins after EMF exposure could be demonstrated with great certainty... Since all these observations were made in in vitro studies, the results obtained neither preclude nor confirm a health risk due to EMF exposure, but they speak in favour of such a possibility."

http://www.powerwatch.org.uk/news/20041222_reflex.asp

Investigation on the health of people living near mobile telephone relay stations: I/Incidence according to distance and sex.

Pathol Biol (Paris). 50(6):369-73 Santini R, Santini P, Danze JM, Le Ruz P, Seigne M (July 2002).



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January 19, 2012

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Decision Proposed Decision of Commissioner Peevy (Mailed 11/22/2011)
BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
On the proposed decision 11-03-014

Dear Commissioners:

The Board of the American Academy of Environmental Medicine opposes the installation of wireless “smart meters” in homes and schools based on a scientific assessment of the current medical literature (references available on request). **Chronic exposure to wireless radiofrequency radiation is a preventable environmental hazard that is sufficiently well documented to warrant immediate preventative public health action.**

As representatives of physician specialists in the field of environmental medicine, we have an obligation to urge precaution when sufficient scientific and medical evidence suggests health risks which can potentially affect large populations. **The literature raises serious concern regarding the levels of radio frequency (RF - 3KHz – 300 GHz) or extremely low frequency (ELF – 300Hz) exposures produced by “smart meters” to warrant an immediate and complete moratorium on their use and deployment until further study can be performed.** The board of the American Board of Environmental Medicine wishes to point out that existing FCC guidelines for RF safety that have been used to justify installation of “smart meters” only look at thermal tissue damage and are obsolete, since many modern studies show metabolic and genomic damage from RF and ELF exposures below the level of intensity which heats tissues. The FCC guidelines are therefore inadequate for use in establishing public health standards. **More modern literature shows medically and biologically significant effects of RF and ELF at lower energy densities. These effects accumulate over time, which is an important consideration given the chronic nature of exposure from “smart meters”.** The current medical literature raises credible questions about genetic and cellular effects, hormonal effects, male fertility, blood/brain barrier damage and increased risk of certain types of cancers from RF or ELF levels similar to those emitted from “smart meters”. **Children are placed at particular risk for altered brain development, and impaired learning and behavior. Further, EMF/RF adds synergistic effects to the damage observed from a range of toxic chemicals.** Given the widespread, chronic, and essentially inescapable ELF/RF exposure of everyone living near a “smart meter”, the Board of the American Academy of Environmental Medicine finds it unacceptable from a public health standpoint to implement this technology until these serious medical concerns are resolved. We consider a moratorium on installation of wireless “smart meters” to be an issue of the highest importance.

The Board of the American Academy of Environmental Medicine also wishes to note that the US NIEHS National Toxicology Program in 1999 cited radiofrequency radiation as a potential carcinogen. Existing safety limits for pulsed RF were termed “not protective of public health” by the Radiofrequency Interagency Working Group (a federal interagency working group including the FDA, FCC, OSHA, the EPA and others). Emissions given off by “smart meters” have been *classified by the World Health Organization International Agency for Research on Cancer (IARC) as a Possible Human Carcinogen.*

Hence, we call for:

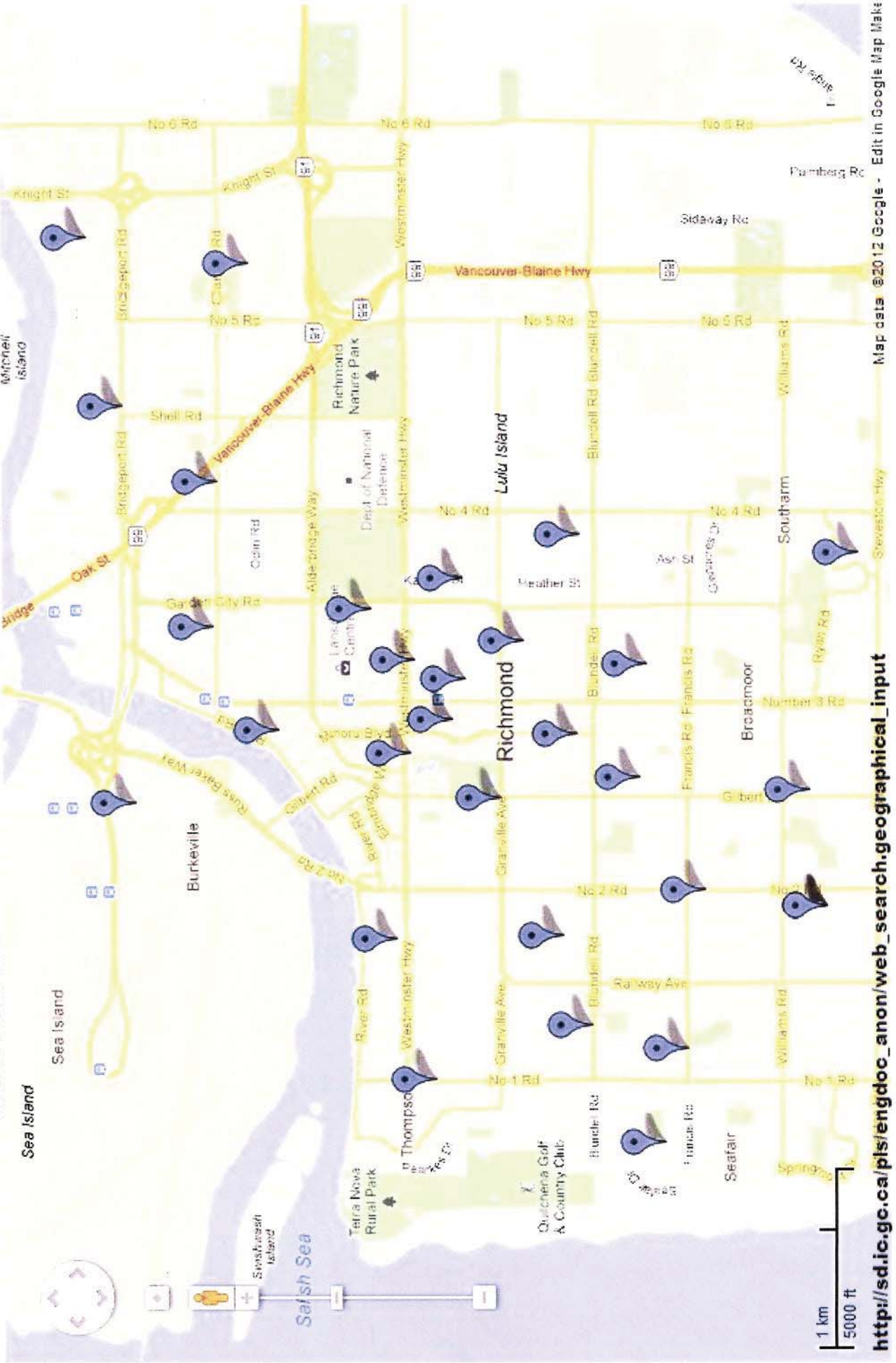
- An immediate moratorium on “smart meter” installation until these serious public health issues are resolved. Continuing with their installation would be extremely irresponsible.
- Modify the revised proposed decision to include hearings on health impact in the second proceedings, along with cost evaluation and community wide opt-out.
- Provide immediate relief to those requesting it and restore the analog meters.

Members of the Board
American Academy of Environmental Medicine

Smart Meter Collection Antennas in City of Richmond

(Proposed Locations)

Feb 2012



(Proposed Locations)

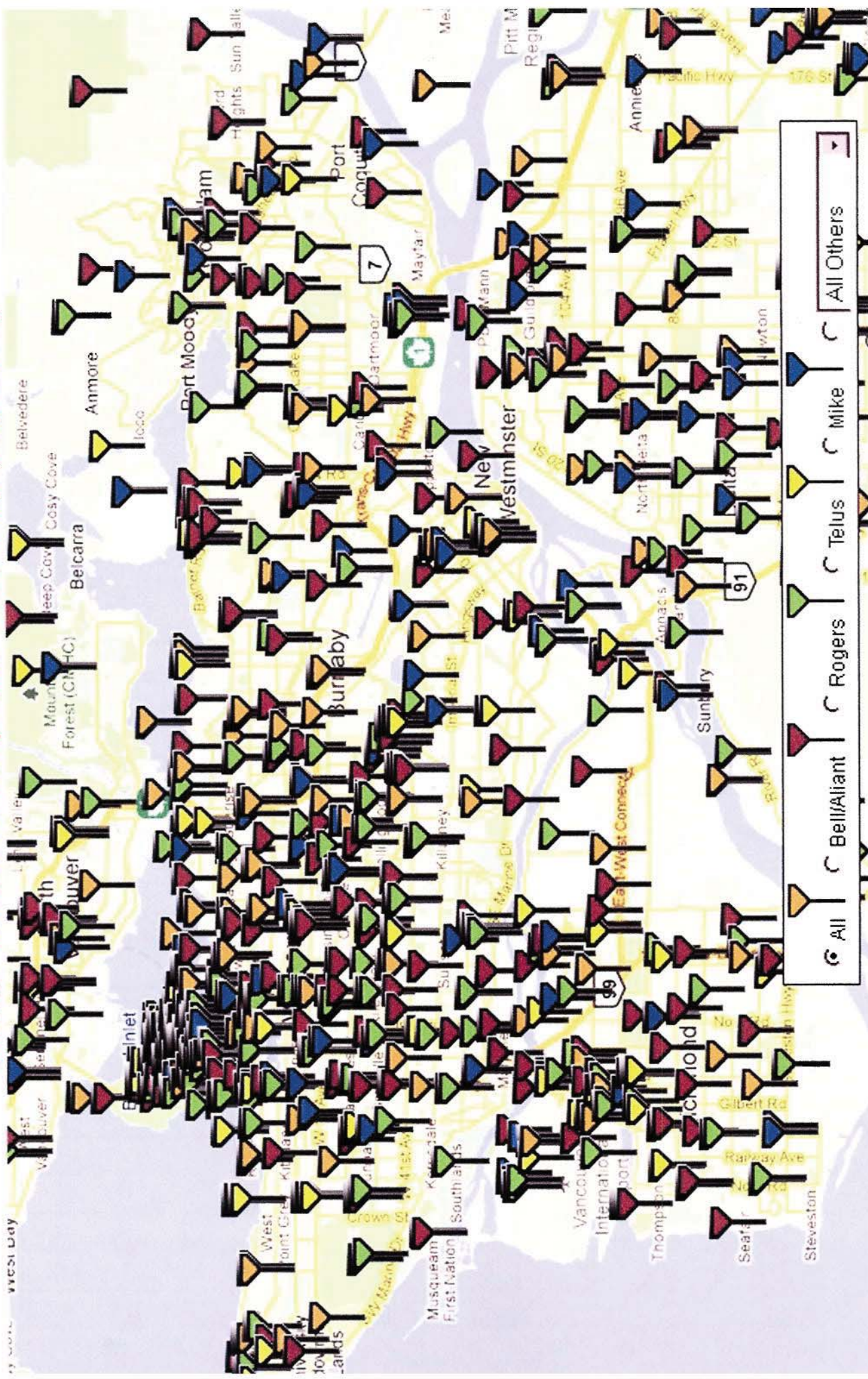
BC Hydro Smart Meters Collection Antennas

Richmond, BC

RICHMOND BC 10060 BAMBERTON DR, RICHMOND BC 6931 GRANVILLE AVE,
RICHMOND BC 10151 CAMBIE RD, RICHMOND BC 7160 LUCAS RD,
RICHMOND BC 10640 SOUTHDALE RD, RICHMOND BC 7362 MOFFATT RD,
RICHMOND BC 11100 BRIDGEPORT RD, RICHMOND BC 7480 LEDWAY RD,
RICHMOND BC 12340 VULCAN WAY, RICHMOND BC 7716 BRIDGE ST,
RICHMOND BC 12440 WOODHEAD RD, RICHMOND BC 7731 MINORU BLVD,
RICHMOND BC 2142 WELLINGTON CT, RICHMOND BC 7980 EPERSON RD,
RICHMOND BC 3760 SEXSMITH RD, RICHMOND BC 8291 BOWCOCK RD,
RICHMOND BC 4260 FRANCIS RD, RICHMOND BC 8548 BENNETT RD,
RICHMOND BC 5500 ARCADIA RD, RICHMOND BC 8591 ELSMORE RD,
RICHMOND BC 5660 WALLACE RD, RICHMOND BC 9120 NO 2 RD,
RICHMOND BC 6100 BOWLING GREEN RD, RICHMOND BC 9440 ALBERTA RD,
RICHMOND BC 6119 COONEY RD, RICHMOND BC SB LYNAS LANE FS
RICHMOND BC 6312 NO 1 RD,
RICHMOND BC 6591 BUSWELL ST,

Source: Industry Canada http://sd.ic.gc.ca/pls/engdoc_anon/web_search.geographical_input

Greater Vancouver Cellphone Tower Map (Sep 2011)



EACH Triangle above represents 4 to 6 Cell Antennas.

Electromagnetic Radiation is a Type 2B Possible Carcinogen to Humans as classified by World Health Organization's IARC



11780 Fentiman Place, Richmond, British Columbia, Canada
Address is approximate

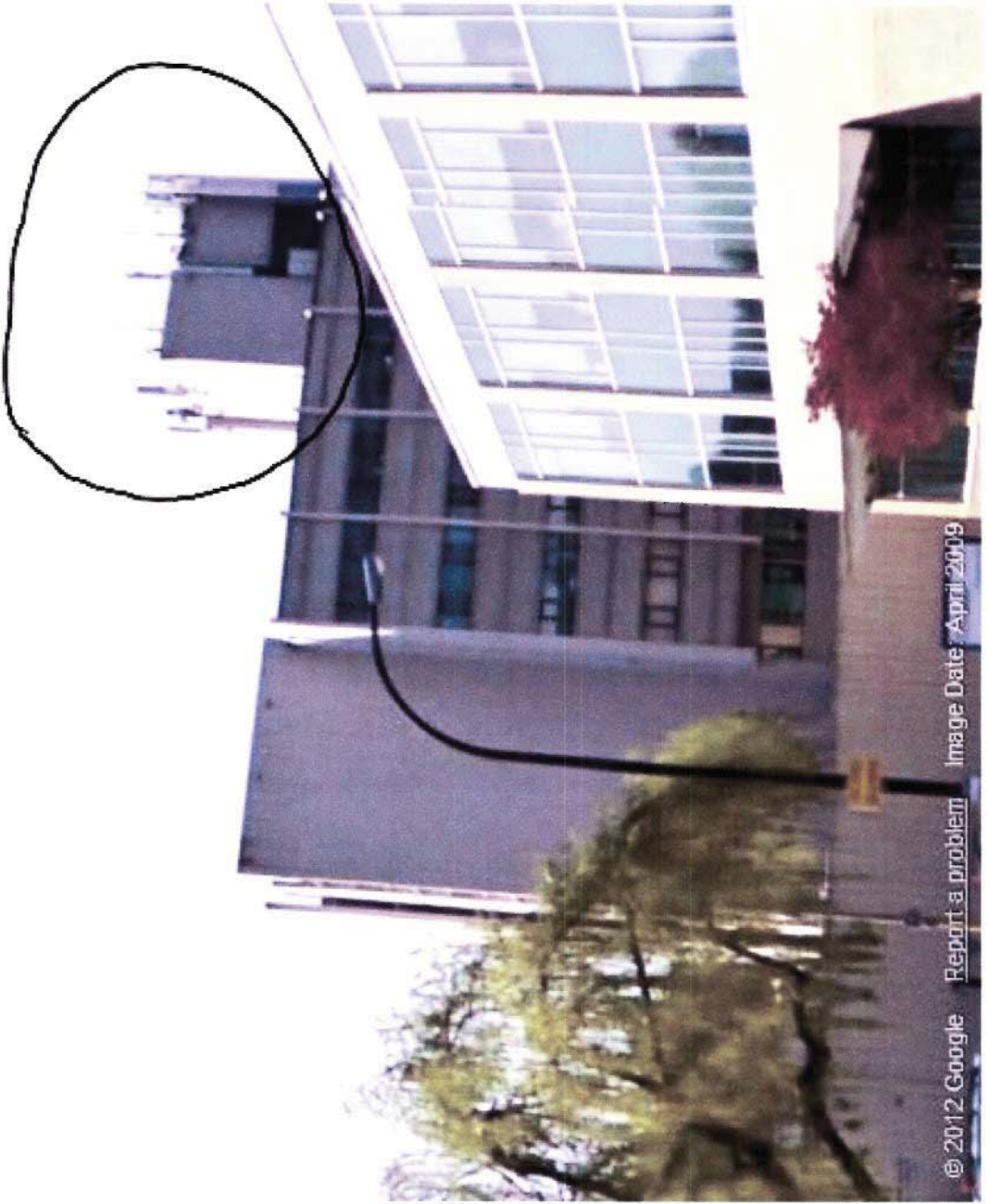
33 Cell Antennas (Telus, Rogers, Bell)



7000 Westminster Highway, Richmond, British Columbia, Canada

Address is approximate

**Richmond General Hospital: 29 Cell
Antennas (Telus, Rogers; excluding
hospital's own radio antennas)**



Lions Manor 11771 FENTIMAN PL – 33 Cell Antennas (Telus, Rogers, Bell)

Search Results	Tx Frequency (MHz)	Rx Frequency (MHz)	Station Location	Licensee Name
869	869	824	W1459-RICHMOND BC 11771 FENTIMAN PL	Rogers Communications Partnership
869	869	824	W1459-RICHMOND BC 11771 FENTIMAN PL	Rogers Communications Partnership
869	869	824	W1459-RICHMOND BC 11771 FENTIMAN PL	Rogers Communications Partnership
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869	869	824	W1459-RICHMOND BC 11771 FENTIMAN PL	Rogers Communications Partnership
880.9056	880.9056	835.9056	"BC1150: 11771 Fentiman Place (Lio"	TELUS MOBILITY/TELE-MOBILE B.C. 800 MHz Band - Upload Account
880.9056	880.9056	835.9056	"BC1150: 11771 Fentiman Place (Lio"	TELUS MOBILITY/TELE-MOBILE B.C. 800 MHz Band - Upload Account
880.9056	880.9056	835.9056	"BC1150: 11771 Fentiman Place (Lio"	TELUS MOBILITY/TELE-MOBILE B.C. 800 MHz Band - Upload Account
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885	885	840	BC1150 11771 Fentiman Place (Lions	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
885	885	840	BC1150 11771 Fentiman Place (Lions	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
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1960	1960	1880	BC1150 11771 Fentiman Place (Lions	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
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1965	1965	1885	W1459-RICHMOND BC 11771 FENTIMAN PL	Rogers Communications Partnership
1980	1980	1900	B0307-11771 FENTIMAN PL	Bell Mobility Inc. (Western)
1980	1980	1900	B0307-11771 FENTIMAN PL	Bell Mobility Inc. (Western)

Sheet1

1980	1900	B0307-11771 FENTIMAN PL	Bell Mobility Inc. (Western)
2110	1710	W1459-RICHMOND BC 11771 FENTIMAN PL	Rogers Communications Partnership Attention: Ms. Dawn Hunt
2110	1710	W1459-RICHMOND BC 11771 FENTIMAN PL	Rogers Communications Partnership Attention: Ms. Dawn Hunt
2110	1710	W1459-RICHMOND BC 11771 FENTIMAN PL	Rogers Communications Partnership Attention: Ms. Dawn Hunt

Richmond General Hospital – 29 Cell Antennas (Telus, Rogers)

806	806	RICHMOND BC 6951WESTMINSTER HWY	TELUS Communications Inc. Attn: Serge Bertuzzo
851	851	RICHMOND BC 6951WESTMINSTER HWY	TELUS Communications Inc. Attn: Serge Bertuzzo
869	824	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
869	824	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
869	824	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
869	824	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
869	824	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
869	824	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
885	840	BC1347 6091 Gilbert Rd. Richmond B	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
885	840	BC1347 6091 Gilbert Rd. Richmond B	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
885	840	BC1347 6091 Gilbert Rd. Richmond B	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
1930	1850	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1930	1850	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1930	1850	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1930	1850	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1930	1850	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1930	1850	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1960	1880	BC1347 6091 Gilbert Rd. Richmond B	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
1960	1880	BC1347 6091 Gilbert Rd. Richmond B	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
1960	1880	BC1347 6091 Gilbert Rd. Richmond B	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
1965	1885	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1965	1885	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1965	1885	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1965	1885	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1965	1885	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
1965	1885	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership
2110	1710	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership Attention: Ms. Dawn Hunt

2110	1710	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership Attention: Ms. Dawn Hunt
2110	1710	W0053-RICHMOND BC 7000 WESTMINSTER	Rogers Communications Partnership Attention: Ms. Dawn Hunt
BC Children and Women's Hospital – 48 Cell Antennas (Telus, Rogers, Rogers, DAVE, Bell)			
855.1875	810.1875	VANCOUVER BC 4255 LAUREL ST	TELUS Communications Inc. Attn: Serge Bertuzzo
858.5875	813.5875	VANCOUVER BC 4255 LAUREL ST	TELUS Communications Inc. Attn: Serge Bertuzzo
860.3125	815.3125	VANCOUVER BC 4255 LAUREL ST	TELUS Communications Inc. Attn: Serge Bertuzzo
861.0875	861.0875	VANCOUVER BC 4255 LAUREL ST	TELUS Communications Inc. Attn: Serge Bertuzzo
861.1375	816.1375	VANCOUVER BC 4255 LAUREL ST	TELUS Communications Inc. Attn: Serge Bertuzzo
864.4375	819.4375	VANCOUVER BC 4255 LAUREL ST	TELUS Communications Inc. Attn: Serge Bertuzzo
864.5375	819.5375	VANCOUVER BC 4255 LAUREL ST	TELUS Communications Inc. Attn: Serge Bertuzzo
864.6875	819.6875	VANCOUVER BC 4255 LAUREL ST	TELUS Communications Inc. Attn: Serge Bertuzzo
869	824	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
869	824	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
869	824	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
869	824	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
869	824	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
869	824	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
869	824	W5104-VANCOUVER BC 4900 CARTIER STR	Rogers Communications Partnership
869	824	W5104-VANCOUVER BC 4900 CARTIER STR	Rogers Communications Partnership
869	824	W5104-VANCOUVER BC 4900 CARTIER STR	Rogers Communications Partnership
880.9056	835.9056	"BC1019: 4255 Laurel St."	TELUS MOBILITY/TELE-MOBILE B.C. 800 MHz Band - Upload Account
880.9056	835.9056	"BC1019: 4255 Laurel St."	TELUS MOBILITY/TELE-MOBILE B.C. 800 MHz Band - Upload Account
880.9056	835.9056	"BC1019: 4255 Laurel St."	TELUS MOBILITY/TELE-MOBILE B.C. 800 MHz Band - Upload Account
885	840	BC1019 4255 LAUREL ST Vancouver BC	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
885	840	BC1019 4255 LAUREL ST Vancouver BC	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
885	840	BC1019 4255 LAUREL ST Vancouver BC	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
931.7375		VANCOUVER BC 4255 LAUREL STREET	Mobility Personacom Canada Ltd Attn: Jan Hart
1930	1850	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1930	1850	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1930	1850	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1930	1850	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership

1930	1850	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1930	1850	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1960	1880	BC1019 4255 LAUREL ST Vancouver BC	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
1960	1880	BC1019 4255 LAUREL ST Vancouver BC	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
1960	1880	BC1019 4255 LAUREL ST Vancouver BC	TELUS RÉGION EST, DONNÉES CELLULAIRES/PCS
1965	1885	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1965	1885	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1965	1885	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1965	1885	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1965	1885	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1965	1885	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership
1980	1900	B0218-4255 LAUREL ST	Bell Mobility Inc. (Western)
1980	1900	B0218-4255 LAUREL ST	Bell Mobility Inc. (Western)
1980	1900	B0218-4255 LAUREL ST	Bell Mobility Inc. (Western)
2110	1710	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership Attention: Ms. Dawn Hunt
2110	1710	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership Attention: Ms. Dawn Hunt
2110	1710	W0497-VANCOUVER BC 4480 OAK STREET	Rogers Communications Partnership Attention: Ms. Dawn Hunt
2135	1735	4255 LAUREL STREET , VANCOUVER	Data & Audio-Visual Enterprises Wireless Inc.
2135	1735	4255 LAUREL STREET , VANCOUVER	Data & Audio-Visual Enterprises Wireless Inc.
2135	1735	4255 LAUREL STREET , VANCOUVER	Data & Audio-Visual Enterprises Wireless Inc.

Haro Park Residential Care Centre 1233 Haro Street – 11 Cell Antennas (Telus)

854.8875	809.8875	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
856.1375	811.1375	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
858.7875	813.7875	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
858.8625	813.8625	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
860.1875	815.1875	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
860.4625	815.4625	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
860.7875	815.7875	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
861.0375	816.0375	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
861.5875	816.5875	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
864.7625	819.7625	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo
865.7875	820.7875	VANCOUVER BC 1233 HARO STREET	TELUS Communications Inc. Attn: Serge Bertuzzo