

EHA-MB
Environmental Health
Association of
Manitoba

November 22, 2023

To: Mayor Gillingham and City of Winnipeg Councillors

From: Margaret Friesen M.Sc.

Subject: Please defer vote on the approval for the Water Meter Renewals until there is broad public consultation to address many unanswered questions re the Water Meter Renewal (with smart water meters) as proposed in the Public Service Report “*Advanced Water Metering Solution Business Case*” and pass #4 regarding an opt-out program.

The Environmental Health Association of Manitoba, Inc. is a not-for-profit, non-governmental, non-partisan organization run entirely by volunteers and funded by donations. Goals of EHA-MB are to promote education and information on environmental sensitivities and environmentally induced illnesses to the public, educational institutions and medical community in Manitoba and to provide information and support to individuals in Manitoba suffering from environmental sensitivities and environmentally induced illnesses. Although we are a small group, we represent many health conditions that are related to environmental factors; we are often referred to as “the canaries in the mines” i.e. early indicators of conditions that can become harmful to others.

EHA-MB’s position is that concrete steps to begin the implementation renewal program for “smart” water meters, specifically the Advanced Metering Infrastructure (AMI) should be deferred. Before this project goes forward:

1. Public consultation is needed. There are too many unanswered questions about this \$135 million project and the public has not been adequately consulted with the opportunity to provide input. It is the residents who will be exposed 24/7 year after year to the emissions from this wireless technology and should be able to make an informed decision as to whether to accept these “smart” water meters into our homes.

It is important to note that the Diameter Services report mentioned in the Public Service report has not been made available to the public (nor it seems to City Councillors) for examination and opportunity to ask questions and get adequate answers. Emails have been sent by many Winnipeg residents to you about the Diameter Services report and only the Public Service report has been provided, not the Diameter Services report. Why not? Is there something to hide in the Diameter Services report?

2. Have in place an appropriate opt-out program. EHA-MB supports recommendation #4 that the Public Service reports with details on a proposed opt-out program. EMA-MB asks that we be contacted for input. We are in touch with individuals across Canada who have opted-out of smart water meters and look forward to sharing that with the Public Service as part of its report. Please advise on how the Council can facilitate that.

One of the concerning points in Cornwall's Diameter Service report is there is no discussion of opt-outs nor that there are health concerns.

What is said is: *"Customers who refuse access are usually significant water consumers who are generally concerned about the impact of metered billing."*

The report then states: *"Recommendation 13: Implement a triple flat rate for non-compliant customers, making metering more palatable. Generally, this method incentivizes customers to allow access and a meter to be installed."*

Some may call this incentivization while others may call it extortion.

Definition of "extortion"– Merriam Webster dictionary:

<https://www.merriam-webster.com/dictionary/extortion>

This was a recommendation to the city and I trust that the city will not follow this recommendation, nor the spirit of this recommendation.

3. All assumptions in (Cornwall's) Diameter Services report should be considered. Note- cost overruns have been encountered in Cornwall as recently as June 2023.

We know from Diameter Services report from the City of Cornwall (Ontario) website¹ that there are assumptions made for estimates. All of these assumptions have not been provided in the Public Service report.

4. Information on costs and cost-overruns in cities where smart meter programs have been in place for some years should be provided, e.g., Toronto, ON and Red Deer, AB. Have realities met projections?

For example see: Update on water meters leads to another Cornwall council debate

<https://www.standard-freeholder.com/news/local-news/update-on-water-meters-leads-to-another-cornwall-council-debate>

5. The Diameter Services report that corresponds to the 31 page "Financial" report for Cornwall should be disclosed. This should be released to the Councillors and the public as part of the public consultation process.

6. Inclusion on the Smart Water Renewal project on the City of Winnipeg Public Engagement website. Please advise on what the public can do to make this happen.

7. Inclusion of a member of EHA-MB on the Steering Committee (mentioned in the Public Service report and transparency in the selection of members. There are no details in the Public Service report on how this committee will be appointed/constituted. Please advise.

Other important points such as health concerns and liability issues are in the EHA-MB submission made on October 27th to the Water, Waste and Environment Committee and have been included in an appendix at the end of this letter.

I would be glad to provide more information. Please advise on the points raised in this submission.

Sincerely,

Margaret Friesen B.Sc.(Honours), M. Sc.

Director, EHA-MB, Email: ehamanitoba@gmail.com

¹ <https://www.cornwall.ca/en/resources/Findings-and-Recommendations-Report-Universal-Water-Meters-06-20-2023.pdf>

Additional information

- **Chronic condition leaves Winnipeg woman homeless** November 1, 2016

<https://winnipeg.ctvnews.ca/chronic-condition-leaves-winnipeg-woman-homeless-1.3141764>

- Canadian Environmental Health Clinic: wireless radiation patients. The Environmental Health Clinic in Toronto is seeing two to three patients a week with adverse symptoms related to wireless radiation exposure. Doctors in this clinic are educating other doctors to recognize symptoms related to wireless radiation exposure.

See: <http://www.newswire.ca/en/story/994377/toronto-hospital-is-first-to-recognize-symptoms-from-wireless-radiation>

and Ontario Environmental Health Clinic (Women's College Hospital) – Environmental News

<http://www.womenshealthmatters.ca/health-resources/environmental-health/environmental-news/>

- **"Physicians of the American Academy of Environmental Medicine recognize that patients are being adversely impacted by electromagnetic frequency (EMF) and radiofrequency (RF) fields and are becoming more electromagnetically sensitive."**

<http://aaemonline.org/AAEMEMFmedicalconditions.pdf>

- **"Adverse health effects from wireless radio frequency fields, such as learning disabilities, altered immune responses, and headaches, clearly exist and are well documented in scientific literature"**

<http://aaemonline.org/wifischool.html>

- **Canadian Human Rights Commission. Policy on Environmental Sensitivities.**

http://www.chrc-ccdp.ca/legislation_policies/policy_environ_politique-eng.aspx [accessed June 1, 2012]

Individuals with environmental sensitivities experience a variety of adverse reactions to environmental agents at concentrations well below those that might affect the "average person". This medical condition is a disability and those living with environmental sensitivities are entitled to the protection of the *Canadian Human Rights Act*, which prohibits discrimination on the basis of disability. The Canadian Human Rights Commission will receive any inquiry and process any complaint from any person who believes that he or she has been discriminated against because of an environmental sensitivity. Like others with a disability, those with environmental sensitivities are required by law to be accommodated.

The CHRC encourages employers and service providers to proactively address issues of accommodation by ensuring that their workplaces and facilities are accessible for persons with a wide range of disabilities.

Successful accommodation for persons with environmental sensitivities requires innovative strategies to minimize or eliminate exposure to triggers in the environment. These may include: developing and enforcing fragrance free and chemical avoidance policies, undertaking educational programs to increase voluntary compliance with such policies, minimizing chemical use and purchasing less toxic products, and notifying employees and clients in advance of construction, re-modeling and cleaning activities. Such measures can prevent injuries and illnesses, and reduce costs and health and safety risks.

For further information on environmental sensitivities, click on the following Commission publications:

The Medical Perspective on Environmental Sensitivities

<https://www.chrc-ccdp.gc.ca/en/resources/publications/the-medical-perspective-environmental-sensitivities>

Accommodation for Environmental Sensitivities: Legal Perspective

https://www.chrc-ccdp.gc.ca/sites/default/files/legal_sensitivity_en_1.pdf

Policy approved by the Commission on June 15, 2007. Renewed 2014.

Appendix – Previous submission

Date: October 27, 2023

To: Chair - Brian Mayes Email: BMayes@winnipeg.ca

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Vivian Santos: email: vsantos@winnipeg.ca

Phone: 204-986-8401

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From: Margaret Friesen M.Sc.

Environmental Health Association of Manitoba

Subject: Please defer vote on Water Meter Renewals. Please provide documentation, in writing, of possession of liability insurance that **does not exclude** health claims due to radiofrequency (RF) radiation exposure to emissions from the smart water meters as proposed in the Public Service Report “Advanced Water Metering Solution Business Case.”

Our members are deeply concerned about the potential for harm and long-term injury from the proposed installation of smart water meters as proposed in the public service report “Advanced Water Metering Solution Business Case.”

I am aware of many individuals across Canada and internationally whose health has been adversely affected after being exposed to smart meters. These concerns are widely recognized, by Rogers communications (Appendix 1) and in the scientific medical literature (Appendix 2). Please note that the frequencies emitted by these smart meters are likely in the same range as for cell towers. This is another area that needs to be clarified before this proposal goes forward.

We are glad to see that there is an “opt-out” being proposed and would like assurances that there will be no cost or very low-cost for this option.

Canadian physicians have diagnosed individuals with electromagnetic sensitivity (EHS—this entails detailed history taking, blood tests etc. Objective tests are being researched, particularly on topics such as brain and heart abnormalities associated with exposure to these non-ionizing electromagnetic fields (EMFs). Information on this can be found at the Environmental Health Trust website.

<https://ehtrust.org/>

In particular, see the section on smart meters: <https://ehtrust.org/?s=smart+meters>

Non-ionizing radiofrequency electromagnetic fields have been classified as a Group 2B *possible* human carcinogen by the World Health Organization’s International Agency for Research on Cancer, and more recent research supports a *known* classification (Group 1). Thus, along with EHS are there are concerns about cancer and other health conditions.

This raises the issue of possible liability. As a concerned resident of Winnipeg and taxpayer, please provide documentation, in writing, possession of liability insurance that **does not exclude** health claims due to radiofrequency (RF) radiation exposure emitted from emissions from the smart water meters as proposed in the Public Service Report “Advanced Water Metering Solution Business Case.”

Please defer your vote on Monday until the question of liability has been resolved and confirmed, and the City is certain it will not be liable for injuries from exposure to electromagnetic radiation emissions from any smart water meters the City installs.

A response would be appreciated.

Sincerely,

Margaret Friesen M.Sc.

Director, Environmental Health Association of Manitoba

APPENDIX 1

Rogers Communications Inc. Rogers 2022 Annual Report

Posted to SEDAR; Rogers Communications Inc. Mar 9 2023 18:25:25 ET Annual report – English PDF 8492K

Quote Heading Page 66

“REGULATORY RISKS”

Quote from Page 67

“Radio frequency emissions

From time to time, media and other reports have highlighted alleged links between radio frequency emissions from wireless devices (including new 5G technology) and various health concerns, including cancer, and interference with various medical devices, including hearing aids and pacemakers. This may discourage the use of wireless devices or expose us to potential litigation even though there are no definitive reports or studies stating that these health issues are directly attributable to radio frequency

emissions. Future regulatory actions may result in more restrictive standards on radio frequency emissions from low-powered devices like wireless devices. We cannot predict the nature or extent of any restrictions.

Rogers Communications Inc. Management's Discussion and Analysis 2022 ANNUAL REPORT ROGERS COMMUNICATIONS INC.

Posted to SEDAR; Rogers Communications Inc. Mar 9 2023 18:19:11 ET MD&A - English PDF 965K

Quote Heading from Page 66

"REGULATORY RISKS"

Quote from Page 67

"Radio frequency emissions"

From time to time, media and other reports have highlighted alleged links between radio frequency emissions from wireless devices (including new 5G technology) and various health concerns, including cancer, and interference with various medical devices, including hearing aids and pacemakers. This may discourage the use of wireless devices or expose us to potential litigation even though there are no definitive reports or studies stating that these health issues are directly attributable to radio frequency emissions. Future regulatory actions may result in more restrictive standards on radio frequency emissions from low-powered devices like wireless devices. We cannot predict the nature or extent of any restrictions.

APPENDIX 2

Studies documenting evidence of injury can be found on the Environmental Health Trust website under the heading:

Peer Reviewed Published Research on Cell Tower Radiation, Base Station Radiation and Health Effects
<https://ehtrust.org/cell-towers-and-cell-antennae/compilation-of-research-studies-on-cell-tower-radiation-and-health/>

Three studies reporting adverse effects on humans from exposure to 5G antenna emissions:

1. Hardell, L., & Nilsson, M. (2023a). **Case Report: A 52-Year Healthy Woman Developed Severe Microwave Syndrome Shortly After Installation of A 5g Base Station Close to Her Apartment.** Annals of Clinical and Medical Case Reports, 10(16), 1–10.

ABSTRACT: In this case report we present a woman aged 52 years who developed health problems consistent with the microwave syndrome after installation of a 5G base station facing her apartment at 60 meters' distance. These symptoms consisted of e.g., headache, dizziness, concentration difficulties, fatigue, arrhythmia, skin burning and nose bleeding corresponding to the microwave syndrome. High radiofrequency (RF) radiation levels were measured in her apartment especially in the part closest to the base station. In her living room at the window 17 500 to 758 000 µW/m² peak levels were obtained during 10 measurements, each over 1 minute. At the place of her sofa in her living room peak levels from 36 800 to 222 000 µW/m² were measured. It is noteworthy that very high radiation was found at the balcony facing the base station. All ten measurements at that place yielded within 10-15 seconds peak levels >2 500 000 µW/m², which is the highest measurable level with the meter used in this study. At the playground about 40 meters from the base station peak levels of 1 120 000 µW/m² and 479 000 µW/m² were measured, respectively. After temporally leaving the apartment for another dwelling with much lower RF radiation, 96 to 2 810 µW/m² peak levels, almost all symptoms disappeared within a short time. After moving back to her own apartment the symptoms reappeared. This study is in line with the results of our two previous case studies showing that installation of 5G caused an extreme increase in exposure and rapid development of the microwave syndrome. These case studies indicate that implementation of 5G cannot be done without the risk of harmful effects on human health.

2. Hardell, L., & Nilsson, M. (2023b). Case Report: **The Microwave Syndrome after Installation of 5G Emphasizes the Need for Protection from Radiofrequency Radiation**. Ann Case Rep, an Open Access Journal ISSN: 2574-77541 Volume 8; Issue 1, 8(1).

ABSTRACT: In this case, report two previously healthy persons, a man aged 63 years and a woman aged 62 years, developed symptoms of the microwave syndrome after installation of a 5G base station for wireless communication on the roof above their apartment. A base station for previous telecommunication generation technology (3G/4G) was present at the same spot since several years. Very high radiofrequency (RF) radiation with maximum (highest measured peak value) levels of 354 000, 1 690 000, and >2 500 000 $\mu\text{W}/\text{m}^2$ were measured at three occasions in the bedroom located only 5 meters below the new 5G base station, compared to maximum (peak) 9 000 $\mu\text{W}/\text{m}^2$ prior to the 5G deployment. The rapidly emerging symptoms after the 5G deployment were typical for the microwave syndrome with e.g., neurological symptoms, tinnitus, fatigue, insomnia, emotional distress, skin disorders, and blood pressure variability. The symptoms were more pronounced in the woman. Due to the severity of symptoms, the couple left their dwelling and moved to a small office room with maximum (peak) RF radiation 3 500 $\mu\text{W}/\text{m}^2$. Within a couple of days, most of their symptoms alleviated or disappeared completely. This medical history can be regarded as a classic provocation test. The RF radiation levels in the apartment were well below the limit proposed to be “safe” below which no health effects would occur, recommended by the International Commission on Non-Ionizing Radiation (ICNIRP). These now presented symptoms of the microwave syndrome were caused by non-thermal effects from RF radiation and highlight that the ICNIRP guidelines used in most countries including Sweden do not protect human health. Guidelines based on all biological negative effects from RF radiation are urgently needed, as well as monitoring human health, not the least due to rapidly increasing levels of exposure.

https://www.gavinpublishers.com/assets/articles_pdf/Case-Report-The-Microwave-Syndrome-after--Installation-of-5G-Emphasizes-the-Need-for--Protection-from-Radiofrequency-Radiation.pdf

3. Nilsson M. & Hardell L. (2023). **Development of the Microwave Syndrome in Two Men Shortly after Installation of 5G on the Roof above their Office**. Annals of Clinical Case Reports, 8, 1–6.

ABSTRACT: The 5th generation, 5G, for wireless communication is rolled out without previous studies on potential effects on human health and the environment. In this case study we describe two men, case 1 and case 2, working in three office rooms close to base stations. After the deployment of 5G, both men developed symptoms typical for the microwave syndrome, e.g., headache, tinnitus, dizziness, balance disorder, concentration and attention deficiency, and fatigue. Radiofrequency Radiation (RFR) after the 5G deployment was measured in the three offices. In office one maximum (peak) RFR during one minute varied from 463 to 1,180,000 $\mu\text{W}/\text{m}^2$, in office two from 6,230 to 501,000 and in office three from 13,700 to 613,000 $\mu\text{W}/\text{m}^2$. The symptoms disappeared in both men within a couple of weeks (case 1) or immediately (case 2) after leaving the office for other offices with much lower maximum peak RFR emissions, maximum for case 1 = 16 and for case 2 = 2,920 $\mu\text{W}/\text{m}^2$. This case report may be regarded as a provocation study on health from 5G RFR. The clinical picture in both men was clearly related to the exposure, although the exposures were well below the guidelines recommended by ICNIRP that are claimed to protect against all health effects. We conclude that the guidelines for RFR exposure based only on tissue heating by ICNIRP are inadequate to protect human health and that 5G appears to provoke symptoms of microwave syndrome in previously healthy people.

https://www.anncaserep.com/open-access/development-of-the-microwave-syndrome-in-two-men-shortly-after-9589.pdf?_cf_chl_tk=7SmWvXmZKdxPnIHlehvQMJD1X3Plj.CWW6VbDuMVe4-1676610128-0-gaNycGzNCdA

Other evidence of injury can be found on the website of Environmental Health Trust:

Peer Reviewed Published Research on Cell Tower Radiation, Base Station Radiation and Health Effects

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