DRAFT 1

Please send any corrections or comments by email to marg.c4st@gmail.com



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1. INTRODUCTION

The science is clear that the risks are real that wireless radiation, such as that emitted from cell tower antennas, is harmful to our health and the environment.

If you have just found out that there is a cell tower being proposed close to you, and you are opposed to it, it is important to act quickly. Once a tower is up, residents have no say, and likely will not know, when new antennas/transmitters are added or how many and of what type. Nor will there be any notification if the Proponent¹ raises the height of the tower by 25%. There is a tight timeline for final approval and much to be done.

This document is intended to give you a place to start.

More and more macro (big) cell towers with multiple antennas are popping up across Canada and, in many cases, will be used to connect wirelessly with "small" antennas placed throughout neighbourhoods to support new generation technologies, including 5G. These small antennas will number in the tens of thousands across the country. Unlike most of the macro towers the small antennas can be excluded from notification or public consultation unless expressly included in a land-use authorities' (LUA)² antenna siting policy. The federal department, Innovation Science and Economic Development (ISED), responsible for approvals of cell antennas, default antenna siting process considers cell network antennas lamp posts, utility poles, on sides and on top of

¹ Proponent: means a company, business or organization providing wireless telecommunication services. *Note:* The requirements of CPC-2-0-03 apply to anyone (referred to as a "proponent") who is planning to install or modify an antenna system, regardless of the type. This includes telecommunications carriers, businesses, governments, Crown agencies, operators of broadcasting undertakings and the public (including for amateur radio operation and over-the-air and satellite TV reception). The requirements also apply to those who install towers or antenna systems on behalf of others or for leasing purposes ("third party tower owners"). Source: ISED, CPC-2-0-03.

² Land-use Authorities: means any local authority that governs land-use issues and includes a municipality, town council, regional commission, development authority, township board, band council or similar body. *Source*: ISED, Guide to Assist Land-use Authorities in developing Antenna system Siting Protocols. https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10860.html

some buildings, as "non-tower structures" and therefore excluded in ISED's circular CPC-2-0-03.³ This circular is the process Proponents must follow when installing an antennas system. Public consultation for small cell antennas may be included in your LUA's antenna siting policy. This is the topic of a separate C4ST document.⁴

If you are reading this because you want to ensure that you will not be faced with a cell tower looking down on you or do not want a cell antenna on the lamp post in front of your home, you may want to jump ahead to Section 4 on how to be proactive.

During and after the effort in opposing a cell tower, win or lose, we hope you will join the C4ST team in working to achieve the goals laid out in the **Urgent Appeal to the Government of Canada to Suspend the 5G Rollout and to Choose Safe and Reliable Fibre Connections**, namely, to press for superior (wired) fibre optic connections, have Health Canada's Safety Code 6 revised properly and to have local residents have a decisive say in the placement of cell network antennas. Please read and sign the Appeal⁶ and check the box to send a message to your Member of Parliament.⁷

As we have seen in Ontario with the passing of Bill 2578 in early 2021, the little control local residents had over the siting of cell antennas will be greatly impaired in that province. Canadians in the rest of Canada would be do well to see if something similar is in the works for their province or territory with the aim to work to stop or amend such legislation.

There will be updates to this document. Please let us know if you have any suggestions for changes or if you find any errors. Email: marg.c4st@gmail.com

³ ISED. Innovation, Science and Economic Development (previously Industry Canada). (2014). **CPC-2-0-03** — **Radiocommunication and Broadcasting Antenna Systems. Spectrum Management and Telecommunications Client Procedures Circular. 5. 19. Section 6.**www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html

⁴ Stop 5G Until Safety Code 6 is Fixed c4st.org

⁵ http://c4st.org/wp-content/uploads/2020/05/Suspend-5G-Canada-Appeal FINAL ENG-2.pdf

⁶ Eight Canadian Non-Government Organizations. (2020, May). **Urgent Appeal to the Government of Canada to Suspend the 5G Rollout and to Choose Safe and Reliable Fibre Connections.** <u>www.c4st.org/wp-content/uploads/2020/05/Suspend-5G-Canada-Appeal FINAL ENG-2.pdf</u>

⁷ C4ST. "Engaging your Member of Parliament (MP) about the Suspend 5G Canada Appeal: C4ST's Suggestions & Facts You Can Use to Reply to Your MP" www.c4st.org

⁸ Legislative Assembly of Ontario. (2021). **Supporting Broadband and Infrastructure Expansion Act, 2021.** <u>www.ola.org/en/legislative-business/bills/parliament-42/session-1/bill-257</u>

2. INFORMATION TO HELP STOP A PROPOSED CELL TOWER

2.1 Background and goals

Approval for cell towers is given by the federal department of Innovation, Science and Economic Development (ISED) with the final say residing with the Minster of ISED. A cell tower can be stopped by ISED not approving the Proponent's application. However, it is better if the process is stopped sooner by the Proponent deciding not to pursue submitting an application or withdrawing its application.

2.1.1 Overall process

Generally, before a pre-application, application or submission is made for the installation of a cell tower, the Proponent⁹ will identify a geographic area it wants to place a cell tower. Sometimes the Proponent will find a privately owned property and sometimes it will work with the LUA to find a location suitable for its needs, perhaps on public land. It will contact the LUA, e.g., a city/town/municipality, on next steps to install a cell tower. Once a lease agreement is signed or the property needed is purchased by the Proponent (becoming the property owner), the Proponent is then required to follow the LUA's requirements according to the LUA's antenna siting polices¹⁰ regarding requirements, such as whether public notification is required (Appendix 5.1). If no policy exists, then the Proponent is required to use the federal government's default process provided in a circular called CPC-2-0-03 (Appendix 5.2).¹¹

Those not in the subscribed area can request a copy of the notification package directly from the Proponent or its representative.

2.1.2 Exclusions

Some cell "towers" are excluded from any public consultation or public notification. See the antennas siting policy for your area, or if there is no policy, then the default process in Section 6 of the ISED circular CPC-2-0-03 will apply.

2.1.3 For cell towers requiring public consultation

For macro towers, the Proponent may, depending on the process it is required to follow, send out a notification package to homeowners within a subscribed area, e.g., for Winnipeg it is 3x

⁹ BELL, Rogers and TELUS are the big names of telecommunications companies in Canada but there are other wireless communications companies, some owned by these bigger ones.

¹⁰ Also called protocol and process.

¹¹ ISED. Innovation, Science and Economic Development (previously Industry Canada). (2014). **CPC-2-0-03** — **Radiocommunication and Broadcasting Antenna Systems. Spectrum Management and Telecommunications Client Procedures Circular. 5. 19. Section 6.** www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html

the height on the tower¹² and for Calgary, it is 300 metres.¹³ These property owners and others will have a set deadline (at least 30 days) to send in their (your) comments, questions, objections, etc. Then, depending on the siting policy, the Proponent may be required to respond to the comments. When the comments are received by the resident (you), will have 20 or so days to respond to those.

That ends the **"formal"** process for the resident (you) unless the resident can engage the Proponent in a further discussion. This is rarely going to result in stopping a proposed cell tower. It will require considerable effort to work with the **"informal"** process to defeat the cell tower.

The Proponent must also obtain a letter from the LUA of "concurrence" (if the LUA agrees with the location) or a letter of "non-concurrence" (if it does not agree).

The Proponent will send all of the letters along with its application to the local ISED office.

ISED looks at all of the material submitted and makes a decision as to whether or not to approve the application. The Minster of the federal department of ISED has final say on the installation of all cell network antennas across Canada. This responsibility has been delegated to others in the department. Because all objections and concerns will be looked at by ISED, it is important to approach all levels of government and others to ask that they submit objections and comments.

It is imperative that anyone opposing a cell tower become familiar with both the process to be followed for the approval of cell towers as well as with the details in the notification package.

Any discrepancies should be noted and included in letters.

YOUR GOALS ARE TO:

- 1) Try and stop the process in the early stages primarily by looking for flaws in the process followed by the Proponent. This may include residents (you) finding and suggesting an alternate site.¹⁴
- 2) Put pressure on the Proponent to do the right thing and withdraw its application for a cell tower close to homes, schools, etc.
- 3) Persuade the LUA to write a letter of non-concurrence. NOTE: The letter of "non-concurrence" from the land-use authority (municipality/town/city) carries much weight with ISED so it is important to make this a major effort.

¹² City of Winnipeg. Planning Property and Development Department. (2015). Winnipeg Antenna Systems Policy (Industry Canada Local Land Use Authority consultation). Adopted by City Council May 27, 2015. In force and Effect May 27, 2015. https://www.winnipeg.ca/ppd/CityPlanning/AntennaSystemsPolicy/default.stm

¹³ City of Calgary. (2014). **Telecommunications Antenna Structure Siting Protocols.** www.calgary.ca/search.html?q=teledommunications+protocol&W srch res=1790

¹⁴ In an industrial park or open fields so the problem is not moved to whether other people live.

- 4) If the LUA has agreed to a cell tower, use whatever procedural means available to persuade them to rescind the agreement.
- 5) Put pressure on ISED the Minister and the staff to not approve the application.

Experience has shown us that both the formal and informal actions need to be worked on at the same time. The most effective ways to defeat a cell tower are to mobilize your community around this effort, get elected representatives (councillors(s), mayor, MP, MLA) and planning staff on board, and have positive media coverage.

2.2 Formal Process

2.2.1 Summary of an example of a cell tower approval/non--approval process

- 1) Proponent identifies a site suitable for its purposes.
- 2) Proponent seeks to sign a lease agreement with a willing property owner or LUA) land-use authority. In some cases, the Proponent may purchase the land.
- 3) Proponent contacts the LUA.
- 4) Proponent is required to follow the LUA's antenna siting policy (Appendix 5.1) or if there is none, ISED's default process (Appendix 5.2).¹⁵
- 5) If the cell tower is not excluded, then public consultation is required. The Proponent often hires a consulting company to conduct the public consultation.
- 6) As part of the public consultation, depending on the process, a notification package is delivered to those residing within 3x the height of the tower.
 - If the default process is followed, for towers more than 30 metres in height, a notice must be placed in a local community newspaper. Telecommunications carriers committed to notify municipalities of all antennas being installed before their construction, regardless of height, and to undertake full public consultation for towers under 15 meters whenever deemed necessary by the municipality.
- 7) The public can provide written comments for at least 30 days or whatever time designated in the siting policy if there is one. It is crucial at this time to voice objections and describe in detail flaws and discrepancies in the public consultation process and elsewhere.
- 8) Within 14 days, the Proponent will acknowledge receipt of the letter with comments, and will "address in writing all reasonable and relevant concerns within 60 days."
- 9) After receiving the response from the Proponent, the resident (you) then have 21 days to reply to the Proponent's responses.
- 10) The formal input from the public ends here unless the resident (you) make a point of continuing communicating with the Proponent.

¹⁵ Some consulting companies: LandSolutions, SitePath, Synergy

- 11) In the meantime, the LUA concurs or does not concur.
- 12) The Proponent/consultant compiles all of the paperwork from above and submits it to ISED for a decision.
- 13) ISED looks at all of the material and in rare occasions will go back to the Proponent to resolve issues.
- 14) ISED makes a decision to approve or not approve the application for the installation of a cell tower.
- 15) There is a dispute resolution process for stakeholders, but the public i.e., a resident (you), is not considered a stakeholder and is excluded.

This formal process rarely results in the cancellation of a cell tower installation. To stop a tower, it's imperative to also pursue the non-formal actions.

2.3 Informal Process

2.3.1 Compare in detail the Proponent's notification package and the land-use authority's antenna siting policy or ISED's default process

If your LUA has an antenna siting policy, read through it in detail to see what the public notification process is for these types of proposals. Find it on the LUA's website or ask the LUA office directly for it. If there is no policy, the Proponent is required to use the federal government's default process provided in circular CPC-2-0-03.

The Proponent, often hiring a consulting company to conduct the public consultation, is required to follow certain steps. This may include hand delivered or mailed notifications to residents and business owners within a specific radius of the proposed site, an advertisement in the larger area newspaper, an advertisement in the local community newspaper circulating in the proposed area, a local online media source and an in-person or online virtual "Town Hall" meeting. Sometimes notices will be posted at the proposed site.

If there are any points that were not followed, emphasize them in your letter writing to the key officials in government and local media contacts. It is extremely important to include these in your objection letter to the Proponent with copies to the local ISED office and the Minister of ISED.

2.4 Gather Information

2.4.1 Contact the property owner

One of the first things to do is contact the owner of the property and see at what stage the process is. Inform him/her about the hazards, his/her potential liability since he/she cannot get insurance, current lawsuits ongoing elsewhere and how and why neighbours are concerned.

2.4.2 Obtain land use information

Use Google Maps to identify where the placement of a tower will be, to see how many houses, schools, etc. will be impacted by a cell tower.

2.4.3 Look for alternate sites for the cell tower

Many of the residents who have been successful in stopping a tower being built close to them have identified an alternate location and persuaded their LUA and Proponent that this is a better option. Look for non-populated areas such as industrial parks and open agricultural fields. No safe distances have been established but some experts advise a minimum distance 500 metres to 2 kilometres from vulnerable populations.

2.4.4 Find out how many transmitters are near you

Visit <u>www.thecelltowers.org</u> or <u>lestourscellulaires.org/distance.php</u> and enter any Canadian address to find out how many microwave transmitters¹⁶ are within a specified radius.

The results will provide much detail including:

- The company name (owner of the transmitters)
- The company's address
- The location of the transmitter (map coordinates)
- The type of transmitter (service), power, frequency, height
- An "info button" (where you can get a lot of technical details on each transmitter, including the license number)

Click on the "map" to see the precise location and the number of transmitters will appear at that location. You can also change the view to satellite view to better see the location. (This program is updated monthly.)

2.4.5 Reach out to other individuals and groups who have experience with opposing cell towers

Most people who have opposed cell towers are willing to provide advice or at least where to look for useful information. See Appendices 5.3 and 5.4.

2.4.6 Read and watch relevant material

See Appendices 5.5 to 5.9, inclusive.

2.4.7 Request email alerts

Ask your LUA for cell tower/antenna alerts to be sent to your email. Watch for agenda items and media articles, so you can voice your concerns.

2.5 Increase Awareness Among Residents and Mobilize Support in Your Community

2.5.1 Design a flyer and or door hangers

 Make sure a flyer includes key information about the proposed tower and a photo if possible. Include the height, how many antennas it will have to start, and why there should be opposition. Highlight potential adverse health effects, devaluing property

¹⁶ Radiocommunication and Broadcasting Antenna Systems. www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html

values, privacy and cyber-security issues. Ask who the insurer will be in case of injury. Include links such as c4st.org and reference credible scientific studies. See Appendix 5.10.

- 2) Include your contact information and a list of key people to write letters/emails/FAXes to express their opposition to the proposed cell tower. Get a new email address to use for this issue if you don't want to use your personal email address.
- 3) Be careful with your wording, as this is a very divisive issue. Make people aware of the project and tell them if they want more information to contact you for more details.

2.5.2 Start a petition for residents to sign.

See <u>Appendix 5.4</u> for sources to find examples. Collect people's names, email addresses and phone numbers to send out more information, with their permission.

2.5.3 Get lawn signs and/or door hangers made up

Ideas can be found at websites listed in Appendix 5.4.

2.5.4 Organize a team

Rally a team of people from your neighbourhood to take on various tasks. Even two or three people can make a big difference.

- 1) Deliver flyers and door hangers door to door, not only within the notification radius of the proposed site but to as many residences and businesses as you can in your area.
- 2) If there is a school or daycare in the area, distribute the flyers to the parents as they arrive to drop off their kids or when they get their kids at the end of the day.
- 3) Distribute to all local businesses as well. Ask if you can leave flyers with them for their clients to take.
- 4) Place flyers in strategic places. In places of high movement, you can do that daily, even hourly to catch new people.
- 5) Consider using Canada Post to send notices to certain postal codes or streets.
- 6) If there is a Fire/Paramedic Hall close to the proposed site, print off key information from iaff.org/cell-tower-radiation/ about why some workers oppose cell towers in close proximity to their workplaces. Deliver this along with some flyers to them.

2.5.5 Decide on a name for your group

Having a group with a name tells politicians and others that it is not just one individual who is opposed but rather an organization. Examples of groups across Canada: Canadians for Safe Technology, Manitobans for Safe Technology, Citizen's Opposed to (Name of site or name of the Proponent) Cell Tower. A catchy acronym is good. See Appendix 5.4 for more ideas.

2.5.6 Survey local resident needs

Conduct a survey (evidence of resident needs), which can be presented to your City Council. Often communities want better internet service (fiber/coax), not wireless signals from cell towers. The priority for most people is faster internet service. Their cell phone service may be adequate for their needs.

2.5.7 Make presentations to the community

Modify the presentation made by others (see <u>Appendix 5.10</u> and section below), outlining the concerns specific to the proposed tower/antenna location. Invite speakers. C4ST will join as a speaker if invited. Invite politicians to attend or speak and let people know which politicians have been invited/refused/attended.

2.5.8 Use social media

Start a Facebook group, use your Instagram account or post on Twitter – whatever you are familiar with – to get your information out.

2.5.9 Hold a rally/protest

Plan for a rally/protest at the site of the proposed tower or the offices of where the letter of concurrence/non-concurrence is issued. Where possible bring signs and banners to raise awareness.

- 1) Take flyers along to distribute.
- 2) Have people sign the petition.
- 3) Make signs and banners opposing the proposed tower.
- 4) Have handouts explaining the downsides of having a cell tower in the community.
- 5) Advertise on your social media platforms the where and when of this and invite people to come and support you.
- 6) Write and send out a news release/media advisory.
- 7) Compile your own media contact list by going online to find the "news desk" or equivalent news outlets in your area. Also, look to see who has written which articles on related issue; email addresses are often at the end of the article.
- 8) Have knowledgeable speakers. Keep to this topic and don't stray into unrelated controversial topics. Keep the presentations short.

2.5.10 Write emails, letters and faxes

People to contact:

- 1) The Proponent, through the consulting company as per the notification package sent to you as part of the public consultation. The contact information will be in this package. This is critical.
- 2) The telecommunications company (Proponent)¹⁷ including the president and board members. Their email addresses will likely be in the same format so if you find one, you may be able to figure out the others. Make phone calls to these same people. Try getting this information through LinkedIn if you have an account.

 $^{^{17}}$ Bell, Rogers, Shaw, TELUS or other company named in the notification package.

- 3) Your LUA's planner for the project (should be listed on the Proponent's notification package).
- 4) Your elected representative , e.g., city councillor. See Section below.
- 5) Your federal Member of Parliament (MP). See Section below.
- 6) Your provincial Member of the Legislative Assembly (MLA/MPP). See Section below.
- 7) Local, provincial/territorial/national media.

Request the provincial Public Health Authority (PHA) to establish background data in case the tower goes ahead. Ask it to ensure monitoring and reporting on the exposure levels and for the PHA to monitor possible related health effects of radiofrequency radiation emitted from antennas. Ask for "buffer zones" or radiofrequency "quiet" areas. Although the federal government takes in billions of dollars in spectrum auctions, it has never conducted a health study of possible adverse effects of radiofrequency radiation on people living in the vicinity of cell towers.

2.5.11 Accessibility may be key for some residents

Find out if there are electrosensitive residents in your community. See Appendix 5.12.

Survey your community about residents with chronic illnesses whose condition may be exacerbated, or recovery hindered, by exposure to wireless radiation.

There is a requirement to accommodate those with disabilities under the *Accessible Canada Act* (ACA), the *Accessibility for Ontarians with Disabilities Act* (AODA) etc.

2.5.12 Advocate for safer fibre-optic (wired) connections which is a superior alternative for safe, fast and reliable connections.

The website Connected Communities, Wired Networks for Crossing the Digital Divide, is an excellent resource: connected-communities.ca

2.5.13 Learn to navigate the run-around

When first approaching local government officials, it is quite common for them to say that approvals for cell towers is federal jurisdiction and so they are powerless. When first approaching Members of Parliament he or she often says they do not interfere in local government affairs. Do not be discouraged or mislead by these responses. See Appendix 5.13 to see how elected representatives wrote letters. Remember – and remind them – that they were elected to represent you, even if you did not vote for them.

2.5.14 Other possible actions

There should be a phone number to get more information (311 or something similar) and email for inquiries for LUA, e.g., city or municipality, services. Complaints to this email can be more effective than an online petition as it has to be officially logged as a complaint and forwarded to the appropriate department(s) for a response. It makes for a good paper trail and keeps key city planners aware there is opposition to this project, and you are not going away.

2.6 Pressure for a "Letter of Non-concurrence" from the Land-use Authority

2.6.1 Your local LUA planning department staff

The Planning department is usually where final decisions are made on whether to issue a letter of concurrence or non-concurrence from the LUA. Try and clarify this with staff.

- 1) Are there legal agreements with the telecommunications companies? If so, are there any references to liability issues?
- 2) Is there liability insurance to cover injuries?
- 3) How the need for a cell tower was determined. Ask to look at the data and how it was collected.
- 4) State your concerns and keep asking questions. Any actions that slow the installation of cell antennas can lead to discussions involving compromise. It will gain more time to inform and get more members of the community onside.
- 5) Have an alternative site prepared. You will have more credibility if you support a different location.
- 6) LUA staff will often start out saying it is not in their jurisdiction because approvals are federal jurisdiction. It is correct that approvals are federal jurisdiction, however, the municipality does have power and influence in that a letter of non-concurrence can be submitted to ISED by your LUA. That letter can also suggest alternate antenna sites.

2.6.2 Contact the elected representatives of the LUA to send a message to support a letter of non-concurrence or to vote "No" to a letter of concurrence

- 1) Educate your elected representatives, such as Councillors and Mayor. Just like LUA staff do, those representatives will often start out saying it is not in their jurisdiction because approvals are federal jurisdiction. It is correct that approvals are federal jurisdiction, however, the municipality does have power and influence in that a letter of nonconcurrence can be submitted to ISED by your LUA. That letter can also suggest alternate antenna sites.
- 2) Contact the LUA and ask to delegate. ¹⁸ There may be a form on the LUA's website, or call to request a delegation form. Find out when the people responsible for decision making are meeting.
- 3) Try to have a full room (or video call) of concerned residents.
- 4) Prepare your presentation.
- 5) Write down your main points and concerns. You can use the following documents for ideas: See <u>Appendix 5.14</u> for Letters (Clegg, Friesen) for information. Other ideas can be found in <u>Appendix 5.15</u> and <u>Appendix 5.16</u>.

Ensure enough information is provided for a full understanding of the issue. Many elected representatives are not aware of the extent of potential harm to health of radiation from

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¹⁸ Opportunity to present at a meeting.

cell tower antennas. They do generally know that the final word rests with the federal government. Therefore, they often believe that there is nothing that they can do. A LUA, e.g., a municipal council, CAN influence whether a cell tower is accepted or where it is placed, and it can definitely refuse antennas on municipal property and on the structures that the LUA owns. By simply delaying the installation of a tower or antenna through public opposition and the LUA's efforts to negotiate a better solution, a more suitable location can sometimes be found. In many cases, cell tower projects have been dropped by the Proponent when it encountered too much opposition from both the citizens and their LUA.

- 6) Ask if your local government has entered into any legal agreements with telecommunications companies.
- 7) If there are legal agreements, is there any reference to liability issues?
- 8) Watch for agenda items as they become available to the public as well as media articles. Whenever there is an opportunity, give a presentation, or at least voice your opposition/concerns.
- 9) Take every opportunity to state your objections/concerns and keep asking questions. Any actions that slow the installation of cell antennas can lead to discussions involving compromise.

2.7 What Your Land-use Authority Can Do

- 2.7.1 Here are some requests that you can make of your town council if the cell tower Proponent has a pre-application or an application in place
 - 1) MOST IMPORTANT: submit a letter of non-concurrence to ISED.
 - 2) Require proof of liability insurance against harmful effects of radiofrequency radiation on health from all telecommunications companies deploying wireless technologies.
 - 3) Place a moratorium on the installation of antennas on property owned or controlled by the city LUA (e.g., owned by the municipality). Typically, Proponents purchase or lease the land to install large towers or, if they wish to attach a smaller antenna to an existing structure (rooftop, utility pole, etc.), they negotiate an occupancy agreement with the owner, which usually includes some form of rent. For now, any owner is free to refuse we believe this includes municipal land and structures.
 - 4) Pass a symbolic resolution calling on the Federal Government to revise Safety Code 6, implement the recommendations of the 2015 HESA Report, and in the interim, to stop 4G/5G rollout of small and macro antennas close to where people spend much time, and to put a hold on the auction of the spectrum.
 - Around the world municipalities have been doing this. In Canada, the town of Sutton, Québec was the first to do so. They adopted a resolution calling on the federal government to institute a moratorium on the deployment of 5G "until the various studies

¹⁹ Lobb, Ben. **Radiofrequency Electromagnetic Radiation and the Health of Canadians** Report No. 13 - HESA (41-2) - No. 13 - House of Commons of Canada," June 20, 2015, 42. Passed by the House of Commons Standing committee on Health (HESA) unanimously in 2015. www.parl.gc.ca/content/hoc/Committee/412/HESA/Reports/RP8041315/hesarp13/hesarp13-e.pdf

reach a consensus on the absence of risks and impacts of 5G cellular technology on health and the environment." pressreader.com/canada/sherbrooke-record/20191220/281560882693827

See <u>appel5gappeal.ca/eng/municipalities.php</u> for what Municipalities in Canada have done, including the three resolutions passed by Niagara Falls.

5) Develop its own policy/protocol for cell antenna siting or improve its policies based on best practices and ensuring full and meaningful participation of residents. If there is no local policy, then the process defaults to the federal policy. Encourage your municipality to create its own customized protocol for the siting of antenna systems.

Many current policies are based on the deeply flawed template developed jointly by the Federation of Canadian Municipalities and the Canadian Wireless Telecommunications Association, and is consistent with Innovation, Science and Economic Development (formerly Industry Canada) rules on Antenna System consultations. This template excludes residents as stakeholders.

Antenna System Siting Protocol Template:

fcm.ca/en/resources/antenna-system-siting-protocol-template

As you will see, it encourages the development of local protocol guidelines that fully express the Municipality's preferences. Ask them to develop stricter guidelines to protect you. For example:

- 6) No antennas on municipal land or structures;
- 7) Require public consultation for all cellular antennas (not just for towers) until Health Canada's Safety Code 6 is properly updated by experts independent of industry influence using the international standards of scientific review;
- 8) Require proof of liability insurance against harmful effects of radiofrequency radiation on health from all telecommunications companies deploying wireless technologies;
- 9) Require any contract to include: assurances that the Proponent, e.g., the telecommunications company, will abide by any new federal government guidelines or regulations that may be established to limit emissions; will de-power antennas and remove antennas and supporting equipment when radiofrequency energy is determined to be a Group 2A or Group 1 carcinogenic hazard (i.e., grandfathering would not be permitted).

2.8 Steps in Preparing and Meeting with the Head of the LUA, Planner and Elected Representatives such as a Mayor or Councillor

2.8.1 Be prepared

- 1) Get to know what issues are important to your elected representatives, e.g., mayor and your councillors. The LUA's website will have some information on these individuals.
- 2) Read over the key messages in the Suspend 5G Appeal. Know the facts and tell your personal story Why is this important to you, and Why you want the proposed tower or antenna moved.

3) Be prepared to answer opposing arguments.

2.8.2 Speaking points when engaging the mayor and council

C4ST has been working for several years to understand how to safeguard health, and working towards solutions. Please review c4st.org to ensure all of your actions are supported. Here are a few speaking notes to consider:

- 1) Thank Council for taking the time to investigate this issue. Many councils do not.
- 2) Councils have many items on their agendas. If you are given time to speak, honour the time commitments and respect the process they ask you to follow.
- 3) Recognize that there is very little authority the LUA, e.g., local council, has at this time, but its pressure on Innovation, Science and Economic Development (formerly Industry Canada), and Health Canada, will support our efforts to change this:
- 4) Final decision on approval once the application is filed for the placement of cell towers and network antennas lies with the Federal Government.
- 5) Currently LUAs, e.g., municipalities, can only comment to ISED, and are often overturned if the LUA objects. Acknowledge that the major change has to come from Innovation, Science and Economic Development, and Health Canada:
- 6) Health Canada sets the guidelines for limits of exposure to humans in a document called Safety Code 6.
- 7) Innovation, Science and Economic Development then licenses the towers that must be in compliance with the guidelines of Safety Code 6.
- 8) ISED does no routine monitoring as far as the public has determined. If it is being done, the public does not have access to this information.
- 9) It is evident that the responsibility of monitoring of radiofrequency levels has been given over to the telecommunications companies who usually use computer graphics, not actual on-site measuring. There is no way of knowing how often this is done nor how cumulative radiofrequency emission levels are determined.
- 10) Once erected, additional transmitters/antennae can be installed without any notification or consultation.
- 11) Acknowledge that the issues that are very important to you, e.g., health and property values, are excluded from consideration. But that doesn't mean that you cannot talk about them. Some decision makers/influencers may realize that the health issues are real and will be motivated to find other ways to stop the tower, without admitting that there could be serious adverse health consequences.
- 12) We realize this can become a very emotional topic; energy and passion are high. Keep all your comments respectful and based on the facts.
- 13) Talk about what you are doing at the federal level to raise this issue.

14) If asked why you feel so strongly and yet still carry a cell phone, you can say: "I am in favour of safe technology, not no technology. I use my cell phone as safely as possible, and I have the option to turn it off and not 24/7 expose myself and others."

2.8.3 Arrange the meeting

- 1) If you do not represent an organization, form your own delegation of concerned citizens. (If you cannot go as a group, go on your own. Your voice matters!)
- Confirm the time and place of your meeting in a follow-up letter or email which also clearly states your purpose of the meeting. Also include who will be attending the meeting.

2.8.4 Getting ready for the meeting

- 1) Prepare an agenda. Have group members address specific areas of expertise, e.g., health, the environment, security, privacy. Be sure to leave time for a discussion.
- 2) Prepare your presentation. Keep it brief and to the point. Plan for a 15-minute meeting or whatever time you have, but also be prepared to have only a few minutes to present the most important points (they may be running behind schedule). See <u>Appendix 5.11</u> for a sample presentation.
- 3) Invite experts to present or write letters.
- 4) Know your "ask" and be clear about what you want.
- 5) Focus on solutions, specifically on the benefits of safe, fast, reliable, wired fiber-to-and-through-the-premises (FTTTP).
- 6) Prepare your handouts. If in person, prepare an information package to leave behind, and most importantly a one-page summary of your main points, as well as your contact information.
- 7) Have extra handouts to leave with the media and others who may have heard you speak and want to know more.

2.8.5 At the meeting

- 1) Introduce yourself, your organization, and C4ST. Keep it brief.
- 2) Aim the presentation to the knowledge level they have about the process and macro towers.
- 3) Explain the goals and objectives for your meeting what you want to achieve.
- 4) Provide your MP, Mayor or Councillor with your one-page summary of your main points.
- 5) Introduce and explain the issues you want to discuss: the need to have the specific tower/antenna moved or cancelled.
- 6) Answer any questions you can, but don't be afraid to say, "I don't know but I'll get back to you." Never state things that you are not sure are accurate.

- 7) Be sincere and passionate share your personal story.
- 8) Take notes and file them for future reference.

2.8.6 Follow-up

- 1) Write a thank you letter to the people to whom you made the presentation.
- 2) Keep in touch add them to your mailing list and follow up on issues discussed at the first meeting.

2.8.7 Meeting with your federal Member of Parliament

This is key because your local MP's support will be helpful in persuading the LUA that a cell tower is not wanted.

Also, it is at the federal level that change must happen: proper updating of Safety Code 6 and of the ISED circular CPC-2-0-03 which includes the default public consultation process.

- 1) You can find background information about your MP on the government website www.ourcommons.ca/members/en
 - Is your MP a Minister, or a member of a committee? If you can, learn about your MP's record on the issue.
- 2) Identify what the MP can do to help, e.g., a letter to Minister of Innovation, Science and Industry²⁰ stating that his/her constituents are opposed to the cell tower. This is the least your MP can do. Remember your MP was elected to represent you whether or not you voted for him/her.

More tips can be found at CALM – Call to Action to Limit Microcells. www.thecalm.ca

More suggestions for actions your MP can take are in the Appendix on page 2 of the C4ST letter in C4ST's "Candidates Who Care About Canadians' Health" campaign https://c4st.org/wp-content/uploads/docs/C4STdocs/C4ST-letter-to-Candidates-for-Election-2021 EN.pdf

2.8.8 Discussion about small antennas on lamp posts, etc. 4G/5G

The macro towers are being built to support 4G/5G small antennas that are being placed in residential areas across Canada. Contact your elected officials, especially your MP, and start with simple questions as to what they know about the local 4G/5G rollout. By email (good because you have a record) or by other means, ask your municipality what they know about any plans for small antennas or about any 4G/5G infrastructure that is being considered. Let them know that fibre-optic connections to the premises (FTTP) are superior.

²⁰ The Minister of Innovation, Science and Economic Development (ISED), 343-291-2500, email: ISI.minister-minstre.ISI@canada.ca.

2.8.9 Corresponding with the federal government

Write a letter to Innovation, Science and Economic Development (ISED) Canada outlining any areas that are not consistent with its circular CPC-2-0-03.

2.9 Extremely important – Respond by Objecting to the Proponent/Consultant about the Cell Tower

Your objections and questions need to be laid out clearly and in detail. Use the word "object" instead of "concerned." From past experience we know that some of the questions are not fully answered or are even ignored. You will have at least another opportunity to follow up on the unanswered, unresolved questions and issues.

All of the correspondence will be sent to the local ISED office for the decision on whether to grant approval for the cell tower.

In addition, this is also perhaps the only time when you will be able to get details about the cell antennas to be placed on the tower, e.g., what frequencies will be used, what is the power output of radiofrequency radiation. See Appendix 5.16 for examples of questions.

- Contact information of the Proponent is included in the notification package delivered to anyone
 within a certain distance from the proposed tower. Share this information with those outside of
 the required proximity and encourage them write letters as well. The Proponent is required to
 respond to all letters of concern.
- 2) The Proponent must consider sharing an existing antenna system, modifying or replacing a structure if necessary.
- 3) Proponents are required to address concerns such as:
 - Why is the use of an existing antenna system or structure not possible?
 - Why is an alternate site not possible?
 - What is the Proponent doing to ensure that the antenna system is not accessible to the general public?
 - How is the Proponent trying to integrate the antenna into the local surroundings?
 - What options are available to satisfy aeronautical obstruction marking requirements at this site?
 - What are the steps the Proponent took to ensure compliance with the general requirements of the Radiocommunication Act including the Canadian Environmental Assessment Act (CEAA), Safety Code 6, etc.?
- 4) Though you can ask them, they are not required to respond to questions regarding:
 - Disputes with members of the public relating to the Proponent's service, but unrelated to antenna installations;
 - Potential effects that a proposed antenna system will have on property values or municipal taxes;

- Questions whether the Radiocommunication Act, Safety Code 6, locally established bylaws, other legislation, procedures or processes are valid or should be reformed in some manner.
- 5) Share correspondence with your LUA, e.g., City or Town Council.

The more questions you can ask, the longer it will take them to respond. The more technical the questions, the more work it is for them and again the longer it will take. If many people contact them asking many questions, the closing date could easily get pushed back until they complete their due diligence in the process. This is key as it can gain you valuable time to rally support.

Continue putting pressure on them by request further information such as radiofrequency/microwave radiation levels of all installed equipment to ensure it is safe for those in your community, and coverage diagrams of alternate locations.

These are some of the points that people used to delay and, in some cases, successfully defeat a proposed cell tower. Each proposal will be different. Look for any angle.

- Not followed proper procedure of the LUA's policy or ISED's default process.
- Navigation lights would be required to go on the tower, but this was not mentioned in the notification package. Note that radar systems may be used instead of navigation lights.
- Lease not signed. Odd, but true.
- Homeowners' association that signed the lease did not follow proper procedure.
 Eventually, the homeowners convened a meeting and voted against the proposal even though they would have to pay a penalty to break the lease agreement.
- The LUA at first passed the proposal but it was not the proper committee. When the issue was brought back to the full committee the proposal was not passed.
- Discovered there was an underground gas pipeline and challenged the proposal based on safety.
- Went to the top and appealed to the president of the telecommunications company (the Proponent) who said his company would not build a tower in a children's playground.
 Also contact anyone along the management chain.
- In one situation where a tower was not built, there were more than 1,000 signatures on a petition of residents opposing the proposed tower.
- Location was not zoned for a cell tower. If residents had not pressed for the city Councillor to look into this, the tower likely would have been installed.
- Most of the community were opposed to a tower proposed for a community centre close to where children played.
- At least one cell tower was not installed after hundreds of customers threatened to cancel their service if the cell tower was built.

Continue correspondence even after the Proponent notes that its response is "final".

2.10 Media

2.10.1 Leverage social media

Do your best to get the word out on Facebook, Instagram, Twitter etc. Information on these platforms can easily and quickly be shared.

2.10.2 Contact local media outlets for radio, print, and television including community newspapers and university radio stations

Contact media and send media releases for community news at each stage. Compile a media list, especially the "news desk." Email addresses and phones numbers should be readily available on media websites but in some cases, you will have to do some digging. Look through your local paper and identify reporter's names to direct your emails to. Look for headings that say, "News Tips" and follow those links. Write to the email addresses/reporters and explain your story and concerns. Be rational, factual, calm and present your story backed up by key scientific studies. Ask for interviews to give more details.

2.10.3 Have a spokesperson designated to speak to reporters

This person should be well-spoken and versed in the project, and can speak calmly without too much emotion. This is a very controversial topic and it is easy for people to tune out when they hear people getting emotionally charged. Try to not just ask for the project to be shut down, but try to provide an alternate location that could be considered if possible. Acknowledge that we need technology and faster Internet speeds more now than ever and assure them that you are not looking to shut the project down but rather are looking for a safer alternate site for the tower. Explain why fibre is better, faster, safer, more secure, etc. See the "Urgent Appeal to the Government of Canada to Suspend 5G Rollout and to Choose Safe and Reliable Fibre Connections" for information. This will garner more support.

2.11 Relevant documents

When in doubt, refer to the original documents issued by the LUA and federal government. Some are listed in Appendix 5.17.

²¹ https://www.appel5gappeal.ca/

3. EVEN WHEN THERE IS BAD NEWS ... THE LUA (TOWN/CITY/MUNICIPALITY) DECIDES TO WRITE A LETTER ON CONCURRENCE, THERE STILL MAY BE OPPORTUNITIES TO STILL STOP THE CELL TOWER

3.1 Background

If the tower gets a 'Yes' from your LUA, you can still protest it and potentially have this tower cancelled or moved to an alternate location as long as you act quickly (within a couple of days). For example, in one case the decision was made at a committee meeting (such as the "Planning and Development Committee") and the minutes included the opportunity for a re-vote at a regular meeting.

3.2 Put Pressure on Your Municipality, Provincial and Federal Government Representatives

3.2.1 Provide information

Present to the LUA, any outstanding concerns or unanswered questions and encourage them to reconsider their decision.

3.2.2 Request accommodations for electrosensitive residents

Find out if there is an electrosensitive resident in your community. Inform them so they can obtain a letter from their physician for accommodation.

3.2.3 Ask Council to write a letter of non-concurrence

Have your group and individuals send messages and call your LUA, e.g., town council members, requesting a letter of Non-Concurrence: state your reasons and an alternative tower location, Connect with Innovation, Science and Economic Development (ISED) Canada to have any concerns or questions addressed. Again, copy your MP on any correspondence. It is important to note any questions that remain unanswered or insufficiently answered by the Proponent (the tower company) as to why an alternate location or co-location cannot be considered.

3.2.4 Write a letter to your Member of Parliament (MP)

Send a letter to your MP urging support for a letter of non-concurrence and copy Prime Minister, Minister of Health, Minister of Innovation, Science and Economic Development, Minister of Environment and Climate Change, Canada's Chief Science Advisor.

3.2.5 Continue to offer alternative locations or options for cell/internet access

3.2.6 Ensure your community and those affected are involved

Encourage your neighbours to contact the LUA, e.g., Town Council, and MP. Provide any medical letters stating the need for accommodations of electrosensitive residents. Remind people about schools, daycare centres, hospitals, senior citizens homes in the area. What about bird sanctuaries, preserves? Correspond professionally and encourage empathy.

Stick to the facts but approach it from the heart.

3.2.7 Despite feelings of frustration and defeat, continue to remain focused on a solution that accommodates everyone's needs

If all fails, the next efforts should be to get the Public Health Authorities engaged so that the health of residents close to the tower is monitored for adverse health outcomes.

3.3 Media Coverage

3.3.1 Contact local media and express concerns and follow-up actions

4. AN OUNCE OF PREVENTION ... BE PROACTVE TO KEEP CELL ANTENNAS AWAY FROM YOUR COMMUNITY

4.1 Background

Tens of thousands of small cell network antennas are being installed throughout towns and Cities across Canada without any safety testing for long term exposures. Some antennas are less than 15 metres from homes.

As well as the information provided here, also check out CALM – Call to Action to Limit Microcells: www.thecalm.ca

Connected Communities. Wired Networks to Cross the Digital Divide: www.connected-communities.ca and SafeG: www.safeg.net/home

4.2 Information Gathering

- 1) Become aware of the negative, biological impact of cellular towers and small cell antennas within close proximity of your home.
- 2) Read the "Urgent Appeal to the Government of Canada to Suspend 5G Rollout and to Choose Safe and Reliable Fibre Connections," which was co-authored by Canadians for Safe Technology (C4ST).
- 3) A number of resources and sample letters for "Engaging Your MP About 5G."23
- 4) Familiarize yourself with Electromagnetic Hypersensitivity (EHS) through resources such as the Electrosensitive Society.²⁴
- 5) Become aware of those in your area that may be vulnerable to increased exposures to electromagnetic frequencies (EMFs). This can include electrosensitive residents, children, and seniors, those who are pregnant and individuals with already compromised immune systems.

²² Urgent Appeal to the Government of Canada to Suspend the 5G Rollout and to Choose Safe and Reliable Fibre Connections. <u>c4st.org/wp-content/uploads/2020/05/Suspend-5G-Canada-Appeal FINAL ENG-2.pdf</u>

²³ C4ST. (2021). "Engaging your Member of Parliament (MP) about the Suspend 5g Canada Appeal: C4ST's suggestions & Facts You Can Use to Reply to Your MP" www.c4st.org

²⁴ Electrosensitive Society. <u>www.electrosensitivesociety.com</u>

- 6) Advocate for and establish low EMF areas in your neighbourhood such as in schools, daycares, community centres, playgrounds, senior's centres as well as forest trails, beaches, parks and essential services to improve accessibility for everyone.
- 7) Support electrosensitive residents in your area. They may have limited access to online resources.
- 8) Do your research on studies demonstrating the risks of exposure to cell tower radiation as well as alternatives such as fibre-optic (wired) connections.

• Cell Tower Exposure Study – DNA Damage, Oxidative Stress

Zothansiama, Zosangzuali, M., Lalramdinpuii, M., & Jagetia, G. C. (2017). *Impact of radiofrequency radiation on DNA damage and antioxidants in peripheral blood lymphocytes of humans residing in the vicinity of mobile phone base stations. Electromagnetic Biology and Medicine*, 1–11. pubmed.ncbi.nlm.nih.gov/28777669/

- The Impact of Radiofrequency Radiation on DNA damage and Antioxidants In Peripheral Blood Lymphocytes of Humans Residing in the Vicinity of Mobile Phone Base Stations <u>pubmed.ncbi.nlm.nih.gov/28777669/</u>
- Re-Inventing Wires -The Future of Landlines and Networks Timothy Schoechle, PhD. (2018).
 Washington, DC: National Institute for Science, Law & Public Policy electromagnetichealth.org/wp-content/uploads/2018/05/Wires.pdf

4.3 Community Action Plan for "Quiet" Low-Radiation Zones

4.3.1 Request email alerts

Ask your LUA (Town/City/Township) clerk for immediate notice sent to your email address whenever there is an application or pre-application submitted for consideration of a cell tower or antenna installation(s). Watch for agenda items and media articles, so you can voice your concerns.

4.3.2 Obtain land use information

Use Google Maps to identify where the placement of a tower will be, to see how many houses, schools etc. will be impacted by a cell tower and small antennas.

4.3.3 Siting protocols

If there is no local policy, then the process defaults to the federal process. Encourage your municipality to create its own customized protocol for the siting of antenna systems with full and meaningful public input.

4.3.4 Find out how many transmitters are near you

Visit <u>www.thecelltowers.org</u> or <u>lestourscellulaires.org/distance.php</u> and enter any Canadian address to find out how many microwave transmitters²⁵ are within a specified radius.

The results will provide much detail including:

- The company name (owner of the transmitter)
- The company's address

²⁵ There can be more than one transmitter inside an antenna box.

- The location of the transmitter (map coordinates)
- The type of transmitter (service), power, frequency, height
- A clickable "info" link (where you can get a lot of technical details on each transmitter, including the license number)

Click on the "map" digits to see the precise location and the number of transmitters will appear at that location. You can also change the view to satellite view to better see the location. (This program is updated monthly.)

4.4 Educate Your Neighbours

4.4.1 Raise community awareness before getting a cell towers/antennas public notice

- 1) Talk to your neighbours and co-workers, email your friends and family, write to your local media, and call your local elected officials. Share what you have learned and be honest when you do not know the answer to a question. Tell them you will find an answer and get back to them. Some people will be receptive, others not. Don't be discouraged by skeptics, as they can be your best allies once they find out the real story.
- 2) Hold a community meeting (virtual or other). Share what you know, invite speakers and have discussions. (A representative from C4ST will present if invited.) As you spread the word to others, collect their contact information (name, phone number, email address, skill set in case they could be helpful for your cause).
- 3) **Circulate information.** Email links to some of the great videos on the subject along with a personal message from you (see Appendix 5.6).
- 4) Write letters to the editor, op-eds or articles for local newspapers and newsletters. See Appendix 5.5.
- 5) **Use social media.** Start a Facebook group, use your Instagram account or post on Twitter whatever you are familiar with to get your information out.
- 6) Write a letter to your neighbours or community and create a flyer for distribution to raise awareness of the dangers of EMFs. Mail it along with the flyer. (Ask your local post office for the price to send unaddressed direct mail to your community; you can decide by postal code or even target a single street.)
- 7) **Put up posters**, distribute flyers door to door, start a petition. See Appendix 5.4.
- 8) Encourage everyone you contact to sign the 5G Appeal at appel5gappeal.ca
- 9) Make a presentation: See Appendix 5.11.
- 10) Show movies or videos to grab attention. See Appendices 5.6, 5.7.
- 11) **Encourage sharing info with your doctors** who often have had no education on the effects of radiofrequency/microwave exposure or electro-sensitivity. See Appendix 5.12.

4.5 Raise Awareness Together

4.5.1 Form an awareness group or join an existing one

- 1) A group is the best way to get results! More and more local groups in Canada are being formed to voice their opposition against cell towers and small antennas with 4G/5G. They are happy to network with each other to share ideas. See Appendix 5.3.
- 2) It starts with one concerned citizen! Get together with like-minded individuals. If you are alone, talk to your neighbours, invite them to an informal meeting and provide them with information. Show a video. Start a conversation.
- 3) Increase your numbers. Put up posters, distribute flyers, show films, hold information sessions (with or without guest speakers), write Op-Eds and letters to the Editor for your local media. In other words, reach out to others, let them know how you feel about the issue and build your contact list. See Appendices 5.3, 5.4, 5.5.

4.5.2 Survey local resident needs

Most people want faster internet service, not necessarily cell service. Conduct a survey to assess residents' needs for cell phone reception and reliable internet service. This information can be presented to your LUA, e.g., city council. Often communities only need better internet service not wireless signals for cell phones. Industry and has been very effective in getting folks to think people need wireless to get good internet service when wired connections (fibre/coax) are superior in many ways. Landline phone are more reliable during long power outages and do not reply on back up batteries or having to be charged as cell phones do.

4.5.3 Educate politicians in your community

Share your resources and encourage them to review C4ST's 5G Appeal Facts at c4st.org.

4.5.4 Ask to meet with your specific elected representative in your LUA area

If your MP, Mayor or Councillor will not meet with you, urge everyone in your community to send emails to them expressing concerns and requesting a meeting. Use the points on the Suspend 5G Appeal website www.appel5gappeal.ca/ as a starting point and inform your MP, Mayor and Councillor about the goals of the Appeal. It may be best to start with the HESA 2015 recommendations found on the last page of the suspend 5G Appeal in Canada because that passed the House of Commons health committee unanimously.

4.5.5 Involve the media

Contact local media to cover your story. Survey residents' needs, information night, connections with politicians etc. When your story becomes publicized, more residents may want to participate.

4.6 Requests to the LUA, e.g., City Council

4.6.1 Gather information

Research and compile information about the potential health effects of wireless telecommunications and the potential liability risks to its community and council members. Provide them with information.

4.6.2 Provide public education

Educate your community on the risks related to the use of wireless devices and safer options. (For example, host a one-day session or an open forum debate.)

4.6.3 Press for the LUA to establish a protective antenna siting protocol

The Connected Communities – Wired Networks for Crossing the Digital Divide website has an example that can be used. www.connected-communities.ca

4.6.4 Press for fibre optic (wired) connections

In urban areas pressure for fibre optic cables to the premises (FTTP). Some regions in Canada are opting for community owned broadband. www.connected-communities.ca/toolkit

Also see the USA site, Institute for Local-Self Reliance. Community Broadband Networks: ilsr.org/broadband-2

4.6.5 Purchase a radiofrequency meter

Chip in to buy one or more meters. This helps make the invisible visible and hearable because some meters, besides readouts also have light and sound functions. Ask you library to buy one to be made available to the community. Make it available for citizens to borrow. If you participate in the BRAG Global RF monitoring project,²⁶ you can get a discount on the type of meter²⁷ used for this project.

4.6.6 Request the provincial Public Health Authority to start monitoring and reporting

Put pressure on the on the provincial Public Health Authority to monitor and report on exposure to, and related health effects of RF radiation.

4.6.7 Provide proof of liability insurance

Request proof of liability insurance from all telecommunications companies deploying wireless signals (cell towers) in the jurisdiction.

4.6.8 Place a moratorium on the installation of small cell antennas

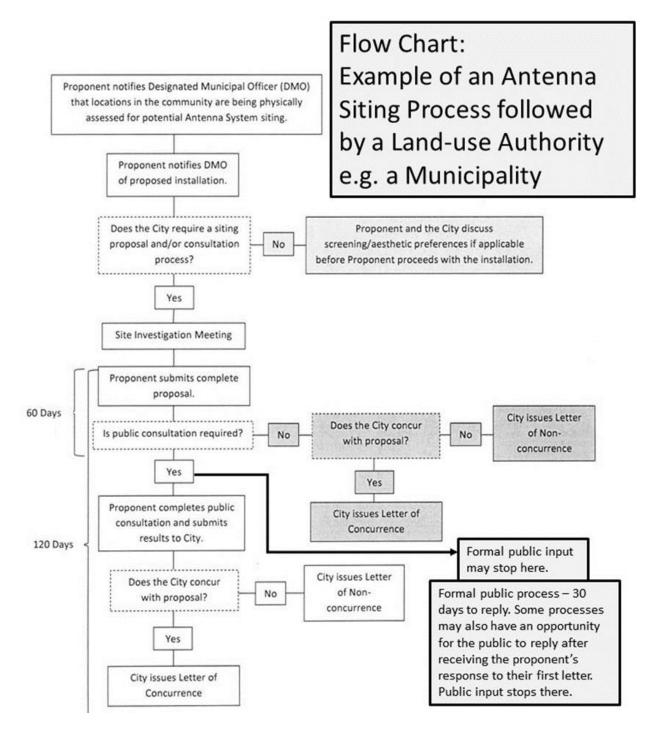
Encourage Council to place a moratorium on the installation of small cell antennas on city owned property until Safety Code 6 is properly updated using the international standards of scientific review and a panel with experts truly independent of industry influence.

²⁶ BRAG, Global RF Monitoring Project: www.globalemf.net

²⁷ Radiofrequency meter. Safe & Sound Pro II: safelivingtechnologies.com/products/safe-and-sound-pro-ii-rf-meter.html

5. APPENDICES

5.1 Appendix: Flow Chart – Example of Land-use Authority Process



5.2 Appendix: ISED's default process²⁸

The Proponent must ensure that at least 30 days are provided for public comment. Notification must provide all information on how to submit comments to the Proponent in writing. Notices must be clearly marked, making reference to the proposed antenna system, so that it is not misinterpreted as junk mail. The notice must be sent by mail or be hand delivered. The face of the package must clearly indicate that the recipient is within the prescribed notification radius of the proposed antenna system. The Proponent must also provide a copy of the notification package to the land-use authority and the local Industry Canada office at the same time as the package is provided to the public.

Notification must include, but need not be limited to:

- the proposed antenna system's purpose, the reasons why existing antenna systems or other infrastructure cannot be used, a list of other structures that were considered unsuitable and future sharing possibilities for the proposal;
- 2) the proposed location within the community, the geographic coordinates and the specific property or rooftop;
- 3) an attestation that the general public will be protected in compliance with Health Canada's Safety Code 6 including combined effects within the local radio environment at all times;
- 4) identification of areas accessible to the general public and the access/demarcation measures to control public access;
- 5) information on the environmental status of the project, including any requirements under the Canadian Environmental Assessment Act, 2012;
- a description of the proposed antenna system including its height and dimensions, a description of any antenna that may be mounted on the supporting structure and simulated images of the proposal;
- 7) Transport Canada's aeronautical obstruction marking requirements (whether painting, lighting or both) if available; if not available, the Proponent's expectation of Transport Canada's requirements together with an undertaking to provide Transport Canada's requirements once they become available:
- 8) an attestation that the installation will respect good engineering practices including structural adequacy;
- 9) reference to any applicable local land-use requirements such as local processes, protocols, etc.;
- 10) notice that general information relating to antenna systems is available on Industry Canada's Spectrum Management and Telecommunications website (www.ic.gc.ca/towers);
- 11) contact information for the Proponent, land-use authorities and the local Industry Canada office; and
- 12) closing date for submission of written public comments (not less than 30 days from receipt of notification).

5.3 Appendix: Canadian Advocacy Groups

5G Winnipeg Awareness <u>www.5gwinnipegawareness.ca</u>

²⁸ Source: CPC-2-0-03 Appendix 1 – Industry Canada's Default Public Consultation Process – Public Notification Package

- CALM: Call to Action to Limit Microcells: www.thecalm.ca
- Campagne Stoppons la 5G Vivons sans danG: https://www.stopponsla5g.ca/
- Citizens Against the Proliferation of Cell Antennas: <u>www.thecelltowers.org</u>
- Coalition to Stop Smart Meters in BC: <u>www.stopsmartmetersbc.com</u>
- CORE: Coalition to Reduce Electropollution: Email: hansk@telus.net
- Electrosensitive Society: www.electrosensitivesociety.com
- EMRABC: EMR Health Alliance of BC: www.emrabc.ca
- EPIC: Electromagnetic Pollution Illnesses Canada Foundation: www.iexistworld.org
- Kingstonians for Safe Technology: <u>www.k4st.ca</u>
- Manitobans for Safe Technology: <u>www.m4st.ca</u>
- Parents for Safe Schools: www.facebook.com/Parents-for-Safe-Schools-428808610553840/
- PCN: Prevent Cancer Now: <u>www.preventcancernow.ca</u>
- WEEP: The Canadian Initiative to Stop Wireless Electric and Electromagnetic Pollution: www.weepinitiative.org

5.4 Appendix: Toolkits and Fact Sheets

Other Useful Toolkits

Canada:

- CALM: Call to Action to Limit Microcells: www.thecalm.ca
- Connected Communities Wired Networks to Cross the Digital Divide: www.connected-communities.ca

USA:

- Environmental Health Trust: <u>ehtrust.org/</u>
- Americans For Responsible Technology: americansforresponsibletech.org/
- What Is 5G Info: whatis5g.info/wp-content/uploads/2019/09/Community-Kit.pdf

5.5 Appendix: Op-Eds/Letters to the Editor in Newspapers

Letters to the Editor written to their local media.

"Cell-tower policy must protect people:"
 https://www.winnipegfreepress.com/opinion/analysis/cell-tower-policy-must-protect-people-300753791.html

"Winnipeg should be cautious of 5G antennas:"
 winnipegfreepress.com/opinion/analysis/winnipeg-should-be-cautious-about-5g-antennas-564489772.html

5.6 Appendix: Educational Videos

- C4ST Frank Clegg. Safety Challenge (5:13): https://c4st.org/blog/
- Dr. Anthony Miller: Radio Frequency Radiation, Cancer and Cell Towers Statement to School District (4:54):
 youtube.com/watch?v=LPs6PAG1H6c
- Dr. Anthony Miller: Epidemiology of Cell Phones and Other Wireless Transmitting Devices An Update (1:45:27):
 ehtrust.org/science/key-scientific-lectures/2017-expert-forum-wireless-radiation-human-health/
- CBC Marketplace: The Secret Inside Your Cell Phone (22:28): bing.com/videos/search?q=the+secret+inside+your+cell+phone&docid=608045950750098429&mid=2C17BE4B174ED64418872C17BE4B174ED6441887&view=detail&FORM=VIRE
- US Senator Blumenthal Raises Concerns About Wireless Technology Health Risks at Senate Hearing (4:51):
 youtube.com/watch?v=ekNC0J3xx1w&feature=youtu.be
- Devra Davis, The Truth About Mobile Phone and Wireless Radiation (1:01:29):
 ehtrust.org/science/key-scientific-lectures/dr-davis-dilvered-the-deans-lecture-at-melbourne-school-of-engineering/
- Frank Clegg: Urgent Appeal to the Government of Canada to Suspend the 5G Rollout and to Choose Safe and Reliable Fibre Connections (8:42): c4st.org/5gappeal/
- Symposium for Ontario's Medical Community, Women's College Hospital, Environmental Clinic: https://www.womenscollegehospital.ca/care-programs/environmental-health-clinic/presentation-conference-june2019
- Let's Fix Stuff: episode "5G Risk Discussion: Former President Microsoft Canada, Frank Clegg, and Former aerospace engineer and Former Michigan State Senator Pat Colbeck (35 minutes): youtube.com/watch?v=DkYvYF8U3JM&feature=youtu.be
- Wireless Technology Forum, held in Lansing, Michigan.
 Speakers included:
 - Dr. A. B. Miller, World Health Organization advisor,
 - Dr. Devra Davis, co-scientific writer of Al Gore's Nobel Winning team,
 - Dr. Ron Melnick, lead scientist for the design of the NTP study and member of the WHO's IARC panel in 2011 that classified RF EMF as possibly carcinogenic to humans. (6:31): youtube.com/playlist?list=PLzxSfWG1ZjiB71mHLQQDUQbE8jjQtiZj0

5.7 Appendix: Educational Movie

Generation Zapped

https://generationzapped.com/#gen-trailer

5.8 Appendix: Cell Tower and Effects on Health Studies

See letters by Frank Clegg and Marg Friesen below.

5.9 Appendix: Wireless Radiation and Effects on the Environment

- Effects of non-ionizing electromagnetic fields on flora and fauna, part 1. Rising ambient EMF levels
 in the environment
 https://pubmed.ncbi.nlm.nih.gov/34047144/
- Effects of non-ionizing electromagnetic fields on flora and fauna, Part 2 impacts: how species interact with natural and man-made EMF
 https://pubmed.ncbi.nlm.nih.gov/34243228/

5.10 Appendix: Flyer Example

One example – Source: Manitobans for Safe Technology www.m4st.ca

[Front of flyer: print on paper in landscape orientation.]

TAKE ACTION CHARLESWOOD!!!

STOP the proposed Multi-Antenna Cell Tower at 523 Harstone Road

Note: This is time sensitive.
The time to act is now!



523 Harstone Road, Winnipeg - Rogers rendering of what this tower will look like in its location

Rogers Telecommunications is proposing to erect a cell tower at 523 Harstone Road in the <u>ProFitness</u> parking lot beside small businesses, homes, <u>Sunnyside Childcare</u> and <u>Ecole Dieppe</u> Elementary School.

The tower's height initially will be 30.6 meters (100 feet). The antenna system will start with 8 antennas with provisions for expansion. Once built, it can be expanded to include many more antennas and the height can be increased by 25% without notification.

Experts on radiofrequency/ microwave radiation emitted by these antennas recommend they be built at a distance of at least 500 meters (1/3 of a mile) from residences and schools.

This proposed tower is in the heart of residential living in Charleswood.

Innovation, Science, and Economic Development (ISED) Canada requires cellular telecommunications facilities to comply with guidelines established by Health Canada (Safety Code 6). The "protective" levels of Safety Code 6 have been called into question by Canadian MDs and other experts. Given the scientific uncertainty and potential irreversible harm if Safety Code 6 is too lenient, the Precautionary Principle and ALARA (As Low As Reasonably Achievable) should be implemented, particularly for vulnerable populations (children, pregnant women, elderly and those with medical conditions).

Scientists and medical doctors warn that Health Canada's so-called "Safety Code 6" guidelines, as

they are now, are not protective. Children are at particular risk.

Locating this tower in a residential area is not appropriate given the potential consequences to human health and is ethically wrong considering the proximity to the school and daycare.

After installation, it will be difficult to shut off or remove. However, in this one example, under intense pressure, Sprint removed its tower near a school in Ripon, California after 4 elementary students and 3 teachers developed cancer.

https://mdsafetech.org/2019/03/25/celltower-to-be-removed-after-4th-riponstudent-diagnosed-with-cancer

It is not worth the risk, especially for our children!

Due to Covid, public information sessions were not conducted and residents of the area were not notified unless you live within 92 meters of the proposed site (less than 5 houses). On March 1 the public inquiry period officially ended. However there still is time to voice your concerns as the City of Winnipeg reviews the proposal until March 28. The time to act is now!

"Contact representatives listed on the back to ensure that this tower is moved to a location 500 m away or more from the school and daycare.

Visit M4ST.ca or email Manitobans4ST@gmail.com



[Example continued: back of flyer, printed in portrait orientation.]

Cell Tower Radiation: Risks to Health & to Property Values

HEALTH

HEALTH CANADA'S GUIDELINES FOR EXPOSURE TO CELL ANTENNA RADIATION ARE NOT PROTECTIVE.

Rogers information letter says they are adhering to Health Canada's Safety Code 6 guidelines for human health. The problem is, these guidelines are out-dated and based on a disproven assumption that only heating of human tissue can cause biological harm. During the latest revision of Safety Code 6, Health Canada ignored requests from 100+ Canadian medical doctors and international scientists to set safety guidelines that are more protective. http://c4st.org/safety-code-6/

CANCER. Radiofrequency radiation (RF), already classified as a "possible human carcinogen" (Group 2B) by the World Health Organization's International Agency for Research on Cancer (IARC), is slated to be re-evaluated. Canadian and other international experts have published peer-reviewed research with proof that radiofrequency radiation should be classified as a "known human carcinogen" (Group 1). Among them is Dr. Anthony Miller, a Canadian MD, former advisor to IARC, epidemiologist and Member of the Order of Canada. Asbestos and cigarette smoke are known carcinogens (Group 1). https://pubmed.ncbi.nlm.nih.gov/30196934/

OTHER HEALTH EFFECTS. There is also evidence of links between radiofrequency/microwave radiation (such as that emitted from cell antennas), infertility, blood abnormalities and neurological dysfunction (including Alzheimer's disease). https://cdnsciencepub.com/doi/pdf/10.1139/A10-018 and https://pubmed.ncbi.nlm.nih.gov/28777669/

CHILDREN ARE PARTICULARLY AT RISK. Research showing radiofrequency/microwave radiation penetrates into deeper brain structures in children than in adults was conducted by Dr. Claudio Fernandez et al. (2018). https://pubmed.ncbi.nlm.nih.gov/29884550/ Dr. Tom Butler summarized some of the studies about why children's health is of particular concern: "Evidence of the Risks to Children from Smartphone and WiFi Radio Frequency Radiation" https://ehtrust.org/evidence-of-the-risks-to-children-from-smartphone-and-wifi-radio-frequency-radiation-by-professor-tom-butler-univers/

IMMEDIATE HEALTH EFFECTS. Some people living near cell towers or in environments where microwave radiation is present 24/7 have developed electromagnetic hypersensitivity and report these symptoms: headaches (pins and needles, sharp pains, pressure), attention deficit (difficulty concentrating, memory lapses), disorientation (dizziness, vertigo, problems with balance), insomnia (sleep disturbances, excessive fatigue), adrenal fatigue, tinnitus (ringing in the ears), irregular heartbeat/pressure in the chest, skin rashes and thyroid problems. https://phiremedical.org/

PROPERTY VALUES

People who are aware of the health risks will avoid purchasing property near cell towers. Information from the USA: https://ehtrust.org/cell-phone-towers-lower-property-values-documentation-research/

FOR MORE INFORMATION go to the "Urgent Appeal to the Government of Canada to Suspend the 5G Rollout and to Choose Safe and Reliable Fibre Connections" c4st.org/5Gappeal and to Canadians For Safe Technology (C4ST) c4st.org. C4ST was founded by the Past President of Microsoft Canada, Frank Clegg. For more of the scientific evidence. c4st.org/wp-content/uploads/2020/05/Supplemental-Material-for-Suspend-5G-Canada-Appeal.pdf

EVERY VOICE COUNTS! It may be years before negative health effects are better documented and understood, and by then it may be too late for those who develop radiation-related illnesses. This is your opportunity to make a positive difference in your community by having the tower relocated 500m away from the school and where children live. Along with other parents and neighbours, **express your concerns and questions to your elected representatives and to Rogers Communications Inc.** to protect children and your community. Please send us a copy of what you send and the replies you receive (confidentiality will be respected).

KEY CONTACTS:

- LandSolutions LP Attn: Brenden Smith, Site Acquisition & Municipal Affairs Specialist, Toll Free 1-866-834-0008, Email: comments@landsolutions.ca
- City of Winnipeg Attn: Femi Ojo, Planner Urban Planning and Design Division, Planning Property and Development, Phone: (204) 986-6008, Email: fojo@winnipeg.ca
- Federal Member of Parliament (MP) for Charleswood -St. James-Assiniboia-Headingley: Marty Morantz, Phone: 204-984-6432, Email: Marty.Morantz@parl.gc.ca
- Winnipeg City Councillor for Charleswood-Tuxedo-Westwood: Kevin Klein, Phone: 204-986-5232. Email: kklein@winnipeg.ca
- Provincial Member of the Legislative Assembly (MLA) for Charleswood: Myrna Driedger, Phone: (204) 885-0594,, Email: myrnadriedger@shaw.ca
- Minister of Innovation, Science and Industry Francois-Philippe Champagne, Phone: 343-291-2500, Email: ISI.minister-minstre.ISI@canada.ca -Local Winnipeg -Phone 1-800-665-3421. Email: ic.spectrumwinnipeg-winnipegspectre.ic@canada.ca
- Rogers Communications Inc. Suite 700, 500 4th Avenue SW Calgary, AB T2P 2V6

To connect with other concerned residents and to send replies received from the above: Email: Manitobans4ST@gmail.com, Website: M4ST.ca

5.11 Appendix: Community Presentations

- Global 5G Awareness Day Winnipeg: 5G Wireless Technology Poses Serious Health Risks (26:40) youtube.com/watch?v=Z9JQyemPsHo
- Standing Policy Committee on Innovation and Economic Development Video (1:05:23) clkapps.winnipeg.ca/dmis/ShowVideo.asp?DocId=19278
- Accessibility Presentation to Town Council (24:38)
 youtube.com/watch?v=Xn IJe- sU8

5.12 Appendix: Handout about Electrosensitivity

Source: Manitobans for Safe Technology www.m4st.ca

Electromagnetic Hypersensitivity (EHS). Modified from Clegg et al. (2020).

Emissions from wireless technologies,* just as other environmental exposures, affect some people more than others. Chronic low exposures or one large exposure, can sometimes initiate electromagnetic hypersensitivity (EHS) — also commonly termed electrical sensitivity, electrohypersensitivity or microwave sickness. This can happen to anyone — children and adults. In plain language some people think of EHS as an "allergy", but that is not medically accurate.

COMMON SYMPTOMS of EHS: Symptoms may vary among affected people, but are reproducible for each individual. Some common symptoms include: headaches, cognitive difficulties, sleep problems, dizziness, depression, fatigue, skin rashes, tinnitus, heart problems and flu-like symptoms (7)(8)(13). Adverse effects of emissions from wireless devices range from mild and readily reversible to severe and disabling; and individuals must greatly reduce their exposures to sources of electromagnetic radiation (3)(11)(16). This condition is usually unexpected, and it is difficult to manage because sources of wireless are commonplace. The notion that EHS is merely a "nocebo" response — that it results from suggestion and worry over possible effects of electronic devices — is the opposite of experience. In a study of 40 people, their EHS was only recognized following a period of illness, skepticism and self-experimentation (5).

PREVALENCE: Surveys conducted in several countries between 1998 and 2007 estimated that approximately 3 to 13 percent of the general population experiences symptoms of EHS, related to known exposures (6)(12)(14)(17).



Symptoms from: EUROPAEM EMF guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and diseases (1).

RECOGNITION: EHS is recognized as a disability in the United States under the *Americans With Disabilities Act* (18). Sweden recognizes EHS as a functional impairment (12). In Canada, the condition is included within environmental sensitivities (2)(16). Legal cases for compensation, disability pensions and accommodation in various countries have been successful (4). The ICD (International Classification of Diseases), maintained by the World Health Organization, has codes for health effects caused by non-ionizing radiation (19).

EVIDENCE AND PRACTICES:

- Physicians' organizations' research, experiences, practices and statements over the years are summarized by the European Academy of Environmental Medicine (EUROPAEM) in 2016 (1). Symptoms, and their severity, vary among individuals. The consensus of the EUROPAEM EMF Guideline 2016 for the Prevention, Diagnosis and Treatment of EMF-related Health Problems and Illnesses is that the most important action for treatment and management of EHS is reduction and avoidance of pertinent exposures in locations where significant amounts of time are spent, especially in sleeping areas. Other recommended measures include a combination of healthy lifestyle measures such as nutrition, stress reduction and measures to avoid toxicants and also reduce levels of toxicants sequestered in the body (1).
- A symposium at Toronto's Women's College Hospital (WCH) for medical practitioners in May 2019 announced (15), Toronto doctors treating patients from over-exposure to wireless radiation are hosting a medical conference today on the growing condition of electrical sensitivity. Dr. Riina Bray, Medical Director of the Environmental Health Clinic at WCH, stated, "My clinic has been assessing patients from across Ontario who are sensitive to microwave radiation from their cell phones, WiFi and smart appliances. Their doctors need to know how to detect the symptoms of electrical sensitivity."

HEALTH CANADA: Health Canada recognizes that EHS symptoms are indeed real but claims "numerous scientific studies to date have failed to demonstrate that these health effects are actually associated with EMF exposures. There is no scientific evidence that the symptoms attributed to EHS are caused by exposure to EMF's" (10)(9).

MANITOBA: There are medical professionals in other Canadian provinces who provide assessment, treatment and support for adults and children who experience symptoms with over-exposure to wireless radiation. In Manitoba, the current approach is to treat symptoms, so underlying causes may not be identified.

* Wireless emissions are non-ionizing electromagnetic radiation. Common sources are cell phones, cordless phones, baby monitors, Bluetooth, tablets, laptops, smart meters, Wi-Fi routers and cell tower antennas.

11 August 2020

5.13 Appendix: Examples of Canadian elected representatives' letters written in support of their constituents' concerns. Identifying information has been redacted by C4ST.

5.13.1 City Councillor to City Planner

_	
March 5,	
Planner City of	
RE: Propos	ed Cellular tower on Road.
Good after	noon,
	for the opportunity to speak on behalf of the residents I represent a proposal from Telecommunication to install mm monopole ructure at Road.
concerned	on request is residential and has many residents in the community and angry. Residents who live close to the proposed location are not pen and transparent responses from the contact provided to them.
	the City of is seeking public input on tower locations in the . It would be inappropriate to permit a tower in a residential area while tion is ongoing.
	nt to note my office tracks all calls and emails. The twoer has generated ect complaints and none in support of the location.
this applica and develo	ppose the request to place a tower at the proposed location at an additional possible possibl
Best Regard	is.
City Council	llor for

5.13.2 Provincial Member of the Legislative Assembly/Parliament to the Proponent

Dear
I am writing regarding the proposed Cell Tower at in my constituency of I have received an inordinate number of complaints from the community in regards to the proposed placement of this tower.
The concerns of this community are certainly legitimate, as they relate to the health and welfare of vulnerable citizens from the community, including a nearby school,
Even though the province has no jurisdiction in this matter, my constituents are of my greatest concern. On their behalf, I urge you to please reconsider this location, as there are many wide-open spaces within the part of the city that may be more appropriate.
Thank you for taking this under advisement, and I look forward to a change of location for this tower.
Sincerely,
MLA for

5.13.3 *Member of Parliament to Minister of ISED*

The Honourable François-Philippe Champagne Minister of Innovation, Science and Industry 235 Queen Street Ottawa, ON K1A 0H5 Sent via email: ISI minister minister ISI/Ocanada ca Re: Proposed Wireless Communications Installation Dear Minister Champagne, I write you today to bring the concerns of members of my community forward regarding a proposed wireless communications installation at in my constituency in Members of the community have expressed numerous concerns about this project installation, citing concerns with the proximity this tower has to a local elementary school and daycare facility. They have also cited concerns with Safety Code 6 and question whether this rule is still up to date regarding the distance that communications installations should be from trasidences or schools. Some of these community members have stated as well that they were unaware of the proposed installation project with enough time to participate in the public consultation process, which installation project with enough time to participate in the public consultation process, which installation were able to be held. While I do recognize the Government of Canada is not involved in the specifics of tower installations, which are dealt with by municipalities, I am aware that these projects are regulated under the Radiocommunication Act and the government generally only gets involved when there is an impasse between the municipality and the company. I do feel however that a the Member of Parliament for the area, I wanted to ensure these concerns from my community were brought to your department's attention. I have also shared a copy of this letter with representatives from the consultants responsible for the installation of this project, Planner leading this project. I would ask that you take these concerns into consideration and respond to me in writing at your eadiest convenience to address them. Sincerely,
Minister of Innovation, Science and Industry 235 Queen Street Octawa, ON K1A 0H5 Sent via email: ISI minister-ministre. ISI meanada.ca Re: Proposed Wireless Communications Installation Dear Minister Champagne, I write you today to bring the concerns of members of my community forward regarding a proposed wireless communications installation at in my constituency in Members of the community have expressed numerous concerns about this project installation, citing concerns with the proximity this tower has to a local elementary school and daycare facility. They have also cited concerns with Safey Code 6 and question whether this tustle is still up to date regarding the distance that communications installations should be from residences or schools. Some of these community members have stated as well that they were unaware of the proposed installation project with enough time to participate in the public consultation process, which restrictions and no restriction and responsibilities, I am aware that these projects are regulated under the Radiocommunication Act and the government generally only gets involved when there is an impasse between the municipality and the company. I do feel however that as the Member of Parliament for
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Ottawa, ON K1A 0H5 Sent via email: [SI minister champagne, It write you today to bring the concerns of members of my community forward regarding a proposed wireless communications installation at my constituency in my concerns with 15¢th Code 6 and question whether this rule is still up to date regarding the distance that communications installations should be from residences or schools. Some of these community members have stated as well that they were unaware of the proposed installation project with enough time to participate in the public consultation process, which must be my
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Dear Minister Champagne, I write you today to bring the concerns of members of my community forward regarding a proposed wireless communications installation at in my constituency in
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Sincerely,

5.14 Appendix: Letters Supporting Cancellation or Movement of a Proposed Cell Tower

5.14.1 Letter by Frank Clegg, CEO of Canadians for Safe Technology (C4ST) to Elected Municipal Representatives

Town of Qualicum Beach #201 - 660 Primrose Street Qualicum Beach, BC V9K 1S7



P.O. Box 33 Maple Grove Village Postal Outlet Oakville, ON., L6J 7P5

Via email: bwiese@qualicumbeach.com; risknes@qualicumbeach.com; skipsey@qualicumbeach.com; <a href="mailto:twostance-decom-particles-decom-partic

Re: Recommendation to the Town of Qualicum Beach Councillors and staff that the proposed cell tower at Qualicum Beach be moved or cancelled.

June 18, 2021

Dear: Mayor Wiese, Councillor Robert Filmer, Councillor Scott Harrison, Councillor Anne Skipsey, Councillor Teunis Westbroek, Mr. Sailland, Ms. Svensen and Mr. Sales;

This letter is being written in support of residents, including concerned parents of young children, living in the Qualicum Beach area to have the proposed cell tower be moved at least 500 metres away from the playground and park. It is also being addressed for consideration of all cell towers and antennas under review in the Town of Qualicum Beach.

I strongly urge you, based on the latest scientific evidence published in peer-reviewed literature and from the clinical experience of medical doctors who regularly see patients with electrosensitivity, to write a letter of non-concurrence for this installation and convey your non-approval. If this installation goes ahead, it is highly likely that the health of local residents will be adversely affected. I also urge you to consider the following in all cell towers or antennas under consideration.

CANADIANS FOR SAFE TECHNOLOGY (C4ST) AND MY BACKGROUND

I have spent my 40+ year career entirely in the technology industry. In my previous role as President of Microsoft Canada, I witnessed the incredible benefits that technology can provide. I also witnessed the potential harmful effects if technology is not implemented correctly. I have invested a significant amount of time researching and talking with experts and now understand the harmful effects to human health that wireless radiation can have.

Nine years ago, when I realized that the improper use of radiofrequency/microwave radiation technology could adversely impact a large proportion of the population with resulting enormous costs to health care, I co-founded Canadians for Safe Technology (C4ST). C4ST is a national, not-for-profit organization that is concerned with the health and safety risks of unsafe wireless technology. We are a volunteer-based, national, coalition of parents, citizens and experts whose mission is to educate and inform Canadians and

policy makers about the dangers of the exposures to unsafe levels of radiation from technology and to work with all levels of government to create healthier communities for children and families.

TOWN OF QUALICUM BEACH COUNCIL IS NOT POWERLESS

Despite statements made by industry representatives, there is a leadership role Council can play in the siting of this tower. C4ST has been engaged in over 50 active cell tower situations across Canada. In several of these situations, working with local residents and councillors, a letter of non-concurrence resulted in the proponent either cancelling the tower all-together or becoming a lot more open to pursuing more acceptable alternatives. Telecommunication providers want to avoid any delays in the process. The town has the time to ensure the tower location is done correctly.

POTENTIAL LIABILITY - LAND USE AUTHORITIES (TOWN OF QUALICUM BEACH)

In addition to the health and safety concerns outlined below, more attention is being given to the potential liability to Council and the Town. Insurers have declined to provide coverage to wireless product manufacturers and U.S. mobile operators for health damages from their products and networks since the early 2000s. Insurers often exclude or limit coverage for the risk from electromagnetic fields (EMFs) posed by commercial general liability policies, decline policyholders in the wireless industry, and only provide coverage via pollution liability policy enhancements.

Insurance authorities also address the risks of electromagnetic fields. In 2014, the Swiss RE report "New Emerging Risk Insights" listed the potential impact of the "Unforeseen consequences of electromagnetic fields" as "High" and examined further incremental risk associated with smart cities. ² In its 2019 update, Swiss Re identified the top two emerging risks to be "digital technology's clash with legacy hardware, and potential threats from the spread of 5G mobile networks". ³ In 2010, the Emerging Risk Team of Lloyds issued a white paper ⁴ indicating that the potential risks to insurers from health damage claims associated with cell phones and wireless radiation are comparable to those posed by asbestos. The 2013 Lloyds Risk Index lists "harmful effects of new technology" as an increasing environmental risk. ⁵

Some corporate insurance policies feature a general exclusion section that explicitly prohibits liability for injury or property damages from electromagnetic fields. This is considered to be a standard across the North American insurance industry. Insurance company policies will often define electromagnetic radiation as a "pollutant." According to the AT&T Mobile 2012 Insurance policy, "Pollutants" mean: "Any ... artificially produced electric fields, magnetic field, electromagnetic field, sound waves, microwaves, and all artificially produced ionizing or non-ionizing radiation and waste." Policy enhancements can be purchased to cover environmental pollutants, which include EMFs. 8,9

Town councillors may be interested in reading the report from the Finance Department of the City of Niagara Falls. 10

HEALTH RISKS FROM CELL TOWER RADIATION: HEALTH CANADA'S SAFETY CODE 6 IS NOT PROTECTIVE

We encourage council to read the document *C4ST Fact-checks Government of Canada Webpages* Regarding Health Risks and Wireless Technologies, including 5G. ¹¹ We would like to raise the following concerns about Safety Code 6.

- Safety Code 6 was established 1979 and has only had very minor revisions in 1991, 1993, 1999, 2009 and 2015.
- During the Safety Code 6 (2015) update, 140 studies were omitted.¹²
- Safety Code 6 is based on the science from 1929^{13,14} that assumes that tissue must be heated to be harmed. This has been disproven by hundreds of studies.
- Health Canada has never completed a proper review, i.e., one based on international standards, ¹⁵ of the peer-reviewed, published literature. Nor has Health Canada ever published any of its analyses on non-thermal effects to justify its claims that Safety Code 6 protects Canadians.
- Health Canada has also never published any of its analysis to support their claim that they
 "continue to monitor all domestic and international scientific evidence on radiofrequency EMF
 and health". Nor has Health Canada provided summaries of what evidence has been reviewed.
- China, Russia, Switzerland and Italy have standards that are 50 times more protective than Canada's.

REASONS FOR THE RECOMMENDATION: POTENTIAL HARM TO THE HEALTH OF LOCAL RESIDENTS

- Evidence from peer-reviewed literature can be found on the Physicians for Safe Technology website, ¹⁶ C4ST's website¹⁷, Environmental Health Trust's website ¹⁸ and TechSafeSchools website. ¹⁹
- Miller at al. (2018)²⁰ present the science for upgrading wireless radiation such as that from cell
 tower antennas to a Group 1, <u>known</u> carcinogen classification by the World Health Organization's
 International Agency for Research on Cancer. Tobacco and cigarette smoke are in Group 1.
- The USA National Toxicology program, National Institutes of Health. \$30 million study found <u>clear</u> <u>evidence of cancer</u> in a large scale animal study.
- The Italian Ramazzini Institute duplicated these <u>findings of cancer from exposure to</u> radiofrequency radiation at cell tower emission levels.²⁴
- The Switzerland BERENIS report has identified the likely mechanism of damage from radiofrequency non-ionizing radiation (at one time it was thought that the energies from NIR could not damage DNA).²⁵
- There are over 30 studies showing DNA damage at below Health Canada's Safety Code 6 (2015)
- Other studies have been collated by C4ST²⁷ and were featured in the CBC TV program "The Secret Inside your Cell Phone" (Wendy Mesley).
- Note that Health Canada's safety Code 6 (2015) has not been updated to include any of the above listed evidence.²⁹
- C4ST recently contributed to an appeal for safe technology which provides only a small portion of
 the sound science upon which our concerns are based. The Appeal includes 5G technologies. The
 proposed tower is just one of many being installed across Canada to support 5G. See: "Urgent
 Appeal to the Government of Canada to Suspend 5G and Choose Fibre Optic Connections"³⁰,
 Supplemental Materials"³¹, "Engaging MP about 5G" and "C4ST Fact-checks Government of
 Canada Webpages Regarding Health Risks and Wireless Technologies, including 5G."³² More
 than 20,000 Canadians have signed the Appeal.
- US State of New Hampshire report. ³³ The report contains 15 recommendations to address inadequate federal protections, educate the public on risk management, engage the medical

- community, install safe hard-wired technology and monitor and map radiation exposures, along with medical and scientific experts, presented at the hearings.
- Recommendations of the Canadian House of Commons Standing Committee on Health (HESA).³⁴
 This was passed unanimously by an all-party committee. Health Canada has not done anything substantive in implementing the recommendations.
- Due diligence is recommended. See this recent Dutch court decision: "Health Impact of Cell Tower Cannot Be Excluded". 35
- Medical doctors and other experts:
 - Two recent medical conferences on the issue of health impacts of wireless radiation. Both offered Continuing Education (CME) credits for MDs. 36,37
- Wired connections over wireless is always the better option³⁸.

I would be pleased to follow-up on this letter with a telephone or video conversation.

Sincerely,

Frank Clegg
CEO, Canadians for Safe Technology (C4ST)
frank@c4st.org

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Recommendation to move the proposed cell tower or antenna

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https://www.youtube.com/watch?v=Wm69ik_Qdb8

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 m 30}$ URGENT APPEAL to the Government of Canada to Suspend the 5G Rollout

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5.14.2 Letter by Marg Friesen, Manitobans for Safe Technology

[Letter begins.]

April 16, 2021

Tawny Verigin: tawny@cypresslandservices.com Peter Grove Islands Trust: pgrove@islandstrust.bc.ca

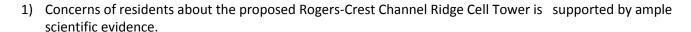
Laura Patrick: lpatrick@islandstrust.bc.ca

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ghorth@crest.ca

Public Consultation: publicconsultation@cypresslandservices.com

Subject:



- 2) Health Canada's Safety Code 6 is not protective of human health.
- 3) Urge opposing this proposed tower, including writing a letter of non-concurrence

I am writing to alert you to the significant body of evidence from the scientific peer-reviewed literature that radiofrequency (RF) radiation emitted from cell tower antennas such as the proposed Rogers-Crest Channel Ridge Tower on Salt Spring Island, B.C., causes adverse health effects.

Based on this evidence, it is highly likely that the health of people living in the area will be harmed if this cell tower is installed.

The City of Winnipeg recently wrote a letter of non-concurrence for a proposed Rogers cell tower. The residents' Member of Parliament, Manitoba Member of the Legislative Assembly, City of Winnipeg Councillor, as well as local school trustees, supported the residents' concerns. The residents invested the time to investigate the health aspects, implications surrounding devaluation of property and safer options.

Background information

I am a research biologist having retired after more than 30 years of service with the federal government where I worked on various research projects including ecosystem toxicology and population genetics of wildlife using DNA technology. I've also worked for the University of Manitoba in cancer research and parasitology. My Master of Science degree is in Entomology/Toxicology and my B.Sc. (Honours) is in Zoology.

After retirement in 2008, I started investigating the scientific evidence underpinning Health Canada's Safety Code 6, the guidelines for human exposure to wireless radiation such as that emitted by the proposed cell tower antennas. I am adding my voice to those of international scientists independent of industry influence



and of Canadian medical doctors, who state that the guidelines in Safety Code 6 (2015), adopted by the federal department Innovation, Science and Economic development (ISED) that regulates cell towers, are outdated and inadequate.

<u>Health Canada's guidelines, Safety Code 6, are outdated and inadequate to protect human health</u> (the numbers in parentheses indicate the references at the end of this letter which are in alphabetical order by first author).

Safety Code 6 (SC6) guidelines were established in 1979 and, although undergoing several revisions, are still based on the now disproven premise that there can be no adverse effects on human health unless there is excessive heating of body tissue. In fact, for the frequencies that would be emitted from this cell tower, Health Canada's Safety Code 6 guidelines would conclude there are no adverse biological effects if heating of tissue from these emissions can be dissipated from body tissues within 6 minutes (Table 2.2.2. Table 5; see reference (7)).

There are hundreds of high quality studies showing harm at emissions levels that are much lower than the maximum levels in Safety Code 6 guidelines, e.g., lower than 1% of SC6. Some studies are summarized in a recent paper by Dr. Anthony B. Miller et al.(10). Another of Dr. Miller's papers (9) summarizes the evidence that radiofrequency radiation, including the type from cell towers, warrants a known carcinogen classification. This is in the same category as asbestos and cigarette smoke. Other studies can be found in the BioInitiative reports (1) (2).

In 2014, during the last revision of Safety Code 6, more than 50 Canadian MDs(4) and more than 50 international scientists (5) called on Health Canada for more protective guidelines/standards for radiofrequency radiation—to no avail.

The flawed process in revising Safety Code 6 is covered in several articles in the Canadian Medical Association Journal (CMAJ) (11) (12) (13).

In short, there is overwhelming evidence that precautions should be taken, especially for children, pregnant women (developing fetuses) and persons with compromised health.

As we know, Health Canada has been slow to act on a number of agents that have proven to cause widespread adverse health effects: asbestos, cigarette smoke, Bisphenol A, thalidomide, vaping, to name a few. Based on what science is telling us, radiofrequency/microwave radiation, such as that emitted from cell tower antennas, is sure to be added to this list.

American medical writer Blake Levitt and Dr. Henry Lai provide a good overview of issues related to cell towers and health in their 2010 review (8). There have been more cell tower and health studies conducted since then and a list of some of them are included at the very end of this letter. A further 200 studies on potentially adverse biological effects from RF radiation exposure published since Safety Code 6 was last revised, can be found on the Canadians for Safe Technology website.²⁹

²⁹ A list of 200 studies are featured in the CBC Marketplace TV program (Wendy Mesley). *The Secret Inside Your Cellphone*. https://www.cbc.ca/player/play/910329411834 and can be viewed at: https://c4st.org/200-scientific-studies-reporting-potential-harm-non-thermal-levels/

Not a single study on health effects of people living in the vicinity of cell towers has been conducted in Canada even though the federal government is taking in billions of dollars in the sale and leasing of spectrum.

I urge you to do what is within your power, including writing a letter of non-concurrence, to prevent this proposed tower from being installed.

Fiber-optic connections to the premises (FTTP) is a superior choice. I would encourage you to pursue this alternative which does not emit harmful radiofrequency radiation and is faster by many times than wireless connections. In addition, it is not as vulnerable to hacking as wireless and environmentally friendlier because it consumes at least 2 to 3 times less electricity. In the long term, fiber-optic connections have been shown to be more economical.³⁰

Please confirm that you have received this email.

Please feel free to contact me with any questions, for clarification or for more information.

Sincerely,

Margaret Friesen M.Sc.

Email: Manitobans4st@gmail.com

Website: https://m4st.ca/

Mission and goals of Manitobans for Safe Technology (M4ST)

M4ST is a volunteer, nonpartisan group of Manitobans concerned about the health aspects of wireless radiation. M4ST's mission is to educate and inform citizens, the medical community, elected representatives and others about the health risks of exposures to wireless radiation with the goal of achieving healthier communities. Goals include a proper revision of Health Canada's Safety Code 6, promotion of wired technologies and implementation of ALARA—as low as reasonably achievable— for all wireless radiation exposures.

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[End of letter.]

5.15 Appendix: Letters to politicians in the USA resulting in the withdrawal of cell towers

- Village of Western Springs (Illinois) to Crown Castle: https://mdsafetech.files.wordpress.com/2020/01/village-of-western-springs-il-letter-to-crown-castle-dec-2019.pdf
- 5G Antenna Application Withdrawn in Western Springs: https://patch.com/illinois/westernsprings/5g-antenna-application-withdrawn-western-springs

5.16 Appendix: Examples of letter and questions to the Proponent as part of the public consultation

[Letter begins]
[DATE]
[NAME of Proponent/company hired to conduct the public consultation]

Dear [NAME of Person who asked for feedback],

I am writing to express my objection to the proposed telecommunications cell tower on the

[LOCATION OF THE TOWER AS IN THE NOTIFICATION PACKAGE] and to ask you to withdraw your application/submission.

As well as questions within the main text of this email, I also have questions under my signature.

The proposed location is [DESCRIBE YOUR SITUATION, for example: ...] in the heart of a residential area, in the middle of a children's playground and 50 meters from a seniors' residence. I live within 300 meters of this proposed tower. I am concerned about the potential negative impacts not only for my children but also what such a tower poses over the health of others, especially the most vulnerable children and elderly (short and long term) on top of the economic impact of the value of the properties (devaluation), and visual reason (unpleasant look).

Please contact me if you have questions or would like clarifications.

Best regards,

[YOUR NAME] [YOUR POSTAL ADDRESS] [YOUR EMAIL ADDRESS]

[ADD CCs to anyone who can influence the decision about the proposed tower. Examples:

- ISED: ic.spectrum LOCAL OFFICE spectre.ic@canada.ca
- MINISTER OF ISED: EMAIL ADDRESS
- Planner, Technical Planning: EMAIL ADDRESS
- Councillor: EMAIL ADDRESS
- MP: EMAIL ADDRESS
- PROVINCIAL ELECTED REP: EMAIL ADDRESS
- OTHER GROUPS: EMAIL ADDRESS

Other concerned residents to keep them informed:

EMAIL ADDRESSES

Questions about the proposed [COMPANY NAME] cell tower:

[YOUR QUESTIONS WILL VARY depending on your circumstances]

- 1. Where exactly is the area which has been determined needs coverage?
- 2. How was this determined?
- 3. Who actually signed the lease?
- 4. What is the length of the lease? What are the provisions and penalties for breaking the lease?
- 5. In the [NAME OF YOUR LUA]'s "Telecommunications Antenna Structures Siting Protocols", it says that "presentation of accurately scaled photographic simulations depicting the proposed facility and its environs is also recommended." These were included in your notification package. However, these artist's renderings were not accurately scaled. Since the two images show the tower from very different distances, the height of the tower should not appear similar in both. Could you please provide us with accurately scaled sketches?
- 6. What is the anticipated number of additional transmitters What is the maximum number of transmitting devices for this tower? What are the technical and common terms for these devices?
- 7. What is the maximum number of receiving devices? What are the technical and common terms for these devices?
- 8. What do these receivers and transmitters look like?
- 9. How often will they monitor the RF levels in the area, including from other sources (cumulative) and will they make these readings public?
- 10. What frequencies will be emitted from the antennas now and in the future? Do these include 600 or 700 MHz? 3.5 GHz? If above 6GHz, which frequencies?
- 11. Is this cell tower part of the infrastructure to support small cell antennas that will be placed on non-tower structures such as lamp posts, utility poles and sides and tops of buildings?
- 12. Will this infrastructure support 5G technologies?
- 13. What other devices could potentially be installed on this tower at its current height?
- 14. What are the technical and commonly used terms for these devices?
- 15. If the tower is raised in height by an additional 25%, how will the residents in the area be notified so they can comment on this alteration of the tower?
- 16. How many cell towers has [COMPANY NAME] built in urban centres that have been raised in height by 25% after the initial installation?
- 17. Would you please provide to me with the pre-submission/application [COMPANY NAME] made to the LUA and/or to ISED? I am aware that proprietary information would be redacted.

- 18. Would you please provide a report of equipment and emissions from another [COMPANY NAME] tower in the LUA? Are there any [COMPANY NAME] towers that have not had additional antennas added after several years after being constructed?
- 19. Which buildings/dwellings homes would have the highest exposure? What radius from the tower? What is the highest power density in W/m2 and as a % of Safety Code 6 limits?
- 20. Are any of the direct beams (lobes) going into windows of dwellings on the main or upper floors of residential homes and other buildings?
- 21. When, and how often will post-installation measurements be made, and will they be publicly posted? If not, how can the public find out what they are?
- 22. Will measurements of the original data in mW/m2 not just percentages of Safety Code 6 be publicly available? Where? When?
- 23. Are there standard procedures in place for radiofrequency radiation measurements at and after installation by [COMPANY NAME] and by Innovation, Science and Economic Development? How many places are measured? What inspections/monitoring is required by regulation by Innovation, Science and Economic Development? Does [COMPANY NAME] do any additional monitoring of emission levels? Will these details be made public?
- 24. Is it possible to have a regular "audit" conducted of actual measurements at various times , e.g., peak usage times?
- 25. How can the general public get notification?
- a. If and when [COMPANY NAME] makes changes to the angle of the antennas and changes in beam (lobe) directions?
- b. If and when more frequencies are added
- c. If and when the power density emissions are increased?
- 26. Will installation of additional antennas be publicly posted, and will there be public consultation? ? If not, why not?
- 27. What are the maximum radiofrequency levels in the future and who will be monitoring this?
- 28. Will this be publicly posted? If no, why not?
- 29. What are the emergency protocols if the levels of emissions are above Safety Code 6 levels?
- 30. In the case of a faulty tower or defective antenna and levels are above Safety Code 6 levels, will [COMPANY NAME] be liable?
- 31. Are there any insurance policies in place in the event of any injuries that are linked to cell tower emissions?
- 32. Is the telecommunications company "self-insuring"?
- 33. In the event that people are injured from exposure to levels emitted by these antennas, who is liable for damages? [COMPANY NAME]? The LUA? Or which other entity?
- 34. Has [COMPANY NAME] ever taken down or reduced signal strength on this type of tower because of public pressure? Details?

- 35. Residents want safe, reliable and fast Internet connections. These are best achieved with fibre optic connection to the premises (FTTP). What is [COMPANY NAME] doing to bring this service to households in my neighbourhood?
- 36. On page X of your information package, under Safety Code 6 Guidelines, you write that [COMPANY NAME] attests that the radio installation will be installed and operated so as to comply with Health Canada's Safety Code 6, "as may be amended from time to time, for the protection of the general public including any combined effects from nearby installations". How will you monitor for the combined effects of RF radiation? Who will monitor for this? Who will be responsible if each facility respects Safety Code 6, but the combined effect exceeds Safety Code 6?
- 37. If Safety Code 6 were amended with a significant lowering of the exposure limits making this installation non-compliant due to its proximity to residences, what steps is [COMPANY NAME] prepared to take?
- 38. On August 28, 2019, the Impact Assessment Act came into force. The Impact Assessment Act creates the new Impact Assessment Agency of Canada and repeals the Canadian Environmental Assessment Act, 2012. According to the government website, "Major projects that have potential for significant adverse environmental effects in areas of federal jurisdiction are called designated projects and require federal review". Why does this project not qualify as a designated project under the Canadian Environmental Assessment Act (or as it is now known Impact Assessment Act)?
- 39. I have been in contact with a number of experts who reside outside of the 300 meter notification area. These signals travel beyond 300 meters and others would also like to make submissions to [COMPANY NAME]. Will you accept communications from them? What would the timeline be for that?

[End of letter.]

5.17 Appendix: Relevant Documents

- Eight Canadian Non-Government Organizations. (2020, May). Urgent Appeal to Suspend 5G Rollout in Canada. http://c4st.org/wp-content/uploads/2020/05/Suspend-5G-Canada-Appeal FINAL ENG-2.pdf
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- ISED. Innovation, Science and Economic Development (previously Industry Canada). (2014b, June 26). CPC-2-0-03 Radiocommunication and Broadcasting Antenna Systems. Spectrum Management and Telecommunications Client Procedures Circular. 5. 19. https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html
- Radiocommunications Act: https://laws-lois.justice.gc.ca/eng/acts/r-2/

6. GLOSSARY

ISED – Innovation, Science and Economic Development: Previously named Industry Canada. The federal department which approves and oversees the licensing and placement of cell phone towers and cell network antennas.

Letter of Concurrence: means a "letter" or other indications from Land-use Authority supporting a Proponent's proposal for the installation of a telecommunication antenna structure within the city. "Depending on the land-use authority's own process, conclusion of local consultation may include such steps as obtaining final concurrence for the proposal via the relevant committee, a letter or report acknowledging that the relevant municipal process or other requirements have been satisfied, or other valid indication, such as the minutes of a town council meeting indicating LUA approval. Compliance with informal city staff procedures, or grants of approval strictly related to zoning, construction, etc. will not normally be sufficient." Source: CPC-2-0-03. Section 4.3.

https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html

Letter of Non-concurrence: means a letter or other indication from the Land-use Authority signifying no support for a Proponent's proposal for the installation of a telecommunication antenna structure within the LUA area.

Land-use Authority (LUA): means any local authority that governs land-use issues and includes a municipality, town council, regional commission, development authority, township board, band council or similar body. This guide complements Industry Canada's Client Procedures Circular CPC-2-0-03, Issue 5, Radiocommunication and Broadcasting Antenna Systems. LUAs are encouraged to consult CPC-2-0-03 to better understand roles and responsibilities.

Proponent: means a company, business or organization providing wireless telecommunication services. *Note:* The requirements of CPC-2-0-03 apply to anyone (referred to as a "proponent") who is planning to install or modify an antenna system, regardless of the type. This includes telecommunications carriers, businesses, governments, Crown agencies, operators of broadcasting undertakings and the public (including for amateur radio operation and over-the-air and satellite TV reception). The requirements also apply to those who install towers or antenna systems on behalf of others or for leasing purposes ("third party tower owners").

Safety Code 6: is a document that sets out recommended safety limits for human exposure to radiofrequency electromagnetic fields (EMF) in the frequency range from 3 kHz to 300 GHz https://www.canada.ca/en/health-canada/services/publications/health-risks-safety/limits-human-exposure-radiofrequency-electromagnetic-energy-range-3-300.html

Safety limits are based only on thermal effects for cell tower exposures. If tissue does not heat above 1C over a periods of 6 minutes, Health Canada deems it is safe for everyone even children exposed 24/7. None of the substantial body of science demonstrating non-thermal effects, such as DNA damage, are incorporated into Safety Code 6 limits.