

Announcements:

1. Speaker: Frank Clegg, Tuesday, May 10th, 2022
Power Point Presentation: Fiber Optics (Environmentally Sustainable, Economically viable practices), even in remote communities.

2. Riding Representative Actions:

Thank you for your great work urging Senators from your province to include RF-EMR in Bill S-5 (CEPA) amendments. We appreciate the efforts you have made to share the CEPA White Paper with them. It was great to hear from some of you about your Senator “Email Blitz” and which Senators responded.

If you have made phone calls to Senators and were able to arrange a meeting, please let us know. Our C4ST Leadership team would be willing to provide you with support if a Senator agrees to meet with you. Marg Friesen, marg.c4st@gmail.com, and Shelley Wright, shelleyw@c4st.org.

As you know, we have been working on having wireless radiation (EMR - electromagnetic radiation) included in amendments to the *Canadian Environmental Protection Act, 1999* (CEPA). We thought it would be going to the House of Commons Standing Committee on Environment and Sustainable Development (ENVI). However, to our surprise, the amendments to CEPA went to the Senate as Bill S-5 - *Strengthening Environmental Protection for a Healthier Canada Act*.

Our understanding is that Bill S-5 was heard in the Senate the week of March 22nd, with instructions to the Senate’s standing committee “Energy, Environment and Natural Resources” (ENEV). We are unclear as to what the Senate can look at and amend. It seems that the amendments to CEPA will then return to the House of Commons and its ENVI Committee, but by then it may be too late in the process to get the amendments we want included.

The C4ST Leadership Team has sent a “Call to Action” out to EMR experts to send in a brief and request to appear as a witness. We have recommended witnesses to the Senate, including Dr. Magda Havas, Dr. Miller, Meg Sears, Dr. Miller, Dr. Paul Heroux, Margaret Friesen, et al.

Here are just a few examples of the things you can do to help us share the CEPA White paper widely:

- Reaching out to groups in your community, provincially and nationally, sharing the CEPA White Paper and asking them to endorse this paper when they communicate with Senators (and copy MP's, MPP's).

You can encourage local grassroots organizations to support C4ST's & PCN's efforts to include RF in Bill S-5, CEPA amendments, by:

- Editing / writing white papers
- Organizing webinars and workshops
- Making short videos for posting on our website and social media
- Social media outreach
- Following-up with Senators and Members of Parliament
- Graphic design
- Translation
- Ideas for promoting the "Protect Birds, Bees & Trees, Include EMR in CEPA" campaign would be appreciated.

Canadian Grassroots/Environmental Organization Outreach:

Please send us the names of grassroots organizations in your community. We will send you a "Call to Action", asking them for support, and if they wish to sign onto the a form we will have on the website. When they sign up, this is letting us know that they agree that Bill S-5 should include a section to address protections of biota from wireless radiation. We would like to share this information with Senators, so they can see that organizations are supporting the EMR inclusion in CEPA.

The sign-on form will be coming soon to the C4ST website.

3. Key Links:

1) From Lyn McLean, EMR Australia:

- Telegram Channel with blogs and social media posts with information about EMF induced Alzheimer's Disease & Childhood leukemia, etc.:
<https://t.me/EMRAustralia/2>
- ACIF Code on the deployment of mobile phone base stations:
<https://www.acma.gov.au/sites/default/files/2020-12/C5642020-Mobile-Phone-Base-Station-Deployment.PDF>

- ARPANSA Regulation in Australia:
<https://www.arpansa.gov.au/regulation-and-licensing/regulatory-publications/radiation-protection-series/codes-and-standards/rpss-1-qa> (March 2022)

2) Urging Senators to include RF-EMR in Bill S-5

Here is where to find your provincial Senators and their contact information:

<https://sencanada.ca/en/senators/>

To follow the Senate's Bill S-5, go to:

<https://sencanada.ca/en/in-the-chamber/debates>

Prevent Cancer Now:

[https://preventcancer.ca/wp-content/uploads/2022/03/EMR in CEPA White Paper by PCN C4ST Feb2022.pdf](https://preventcancer.ca/wp-content/uploads/2022/03/EMR_in_CEPa_White_Paper_by_PCN_C4ST_Feb2022.pdf)

Supporting scientific evidence: Levitt, B. B., Lai, H. C., & Manville, A. M. (2021): three-part scientific review recommend regulation of EMR originating from human activity (anthropogenic) as pollution:

<https://pubmed.ncbi.nlm.nih.gov/34047144/>

<https://pubmed.ncbi.nlm.nih.gov/34243228/>

<https://pubmed.ncbi.nlm.nih.gov/34563106/>

Reference: Planetary Electromagnetic Pollution: It Is Time to Assess Its Impact. The Lancet. (2018): 512-14:

[https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(18\)30221-3/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(18)30221-3/fulltext).

C4ST Auditor General Petition 456 Submission and Government Responses can be found here:

[https://c4st.org/wp-content/uploads/docs/GovRelations/Fed/Health-Canada/5G Petition and Government Response.pdf](https://c4st.org/wp-content/uploads/docs/GovRelations/Fed/Health-Canada/5G_Petition_and_Government_Response.pdf)

Page 8. [https://c4st.org/wp-content/uploads/docs/GovRelations/Fed/Health-Canada/5G Petition and Government Response.pdf](https://c4st.org/wp-content/uploads/docs/GovRelations/Fed/Health-Canada/5G_Petition_and_Government_Response.pdf)

Government of Canada. (2017). Healthy Environment, Healthy Canadians, Healthy Economy: Strengthening the Canadian Environmental Protection Act, 1999. Report of the Standing Committee on Environment and Sustainable Development. Deborah Schulte, Chair.

<https://www.ourcommons.ca/DocumentViewer/en/42-1/ENVI/report-8>

<https://pubmed.ncbi.nlm.nih.gov/34047144/>

<https://pubmed.ncbi.nlm.nih.gov/34243228/>

<https://www.degruyter.com/document/doi/10.1515/reveh-2021-0083/html>

Canada: Friesen, M., & Havas, M. (2020). Effects of Non-ionizing Electromagnetic Pollution on Invertebrates, Including Pollinators such as Honey Bees: What We Know, What We don't Know, and What We Need to Know. In Working Landscapes. Proceedings of the 12th Prairie Conservation and Endangered Species Conference, Danyluk (ed.). February 2019, Winnipeg, Manitoba. 203 pages. (pp. 127-138). Critical Wildlife Habitat Program, Winnipeg, Manitoba. Retrieved from: <http://pcesc.ca/media/45404/final-2019-pcesc-proceedings.pdf>

India: Kumar, S., Singh, V. K., Nath, P., & Joshi, P. C. (2020). An overview of anthropogenic electromagnetic radiations as risk to pollinators and pollination. Journal of Applied and Natural Science, 12(4), 675-681. <https://doi.org/10.31018/jans.v12i4.2420>

Spain: Balmori, A. (2021). Electromagnetic radiation as an emerging driver factor for the decline of insects. Science of The Total Environment, 767, 144913. <https://doi.org/10.1016/j.scitotenv.2020.144913>

Guest Speaker, Tues. April 5th, 7:30: Lyn McLean, EMR Australia

Introduction

- Executive Officer of the EMR Association of Australia and Secretary of its forerunner, the EMR Alliance for nine years. EMR Australia is Australia's leading resource for creating EMR-safe homes, businesses and learning environments.
- Established in 2003, EMR Australia helps Australians, no matter where in Australia they live or work, to understand and reduce their exposure to this Class 2B carcinogenic environmental pollutant.
- Deputy Chair, of the ACIF Committee that developed the Code for the Deployment of Radio Communications Infrastructure - and Deputy-Chair of the Communications Alliance committee that revised this Code in 2010-2011.
- A member of the Department of Health's EME Reference Group, hosted by ARPANSA, for over 15 years.
- A member of the local government committee that developed the Model Telecommunications and Radio communications DCP.
- A member of the Consultative Group for the development of the Australian Standard for ELF 2004-2011.
- A qualified trainer and educator; who has presented at conferences, Senate Inquiries, committees and numerous public meetings.
- Lyn has written extensively for newsletters and magazines and given media interviews.
- She is the author of four books on electromagnetic radiation:
 - 'Wireless-wise Families', Scribe, 2017
 - 'The Force - living safely in a world of electromagnetic pollution', Scribe, 2011;
 - 'Wireless-wise Kids - safer ways to use mobile and wireless technology', 2013.
 - 'Watt's the Buzz?', Scribe, 2004
- She is co-author of the paper '*Measurement and analysis of power-frequency magnetic fields in residences: Results from a pilot study*', Malka N Halgamuge and Lyn McLean, Measurement 125(2018):415-424.
- Lyn has published a regular report, '*EMR and Health*', since 1996.

C4ST's notes from Lyn's Presentation: Making waves

Hello, I'm Lyn McLean & I'm really pleased to be talking to you today. I've been working in the area of electromagnetic fields for 26 years & Shelley has kindly invited me to talk with you about it. I've called my presentation 'Making Waves' because the industry is making waves - and so are we. So, let me take you to the beginning.

It's 1996. I find myself in the world of electromagnetic radiation by accident; it feels like I'm a terrible fit.

1. I'm a woman in a world where the credibility rests with men.
2. I'm a single mum with 2 young children
3. I'm not a scientist or an electrical engineer. My background is in teaching - not science but, wait for it, German, English and History.
4. I'm an environmentalist. My job is to help run Sutherland Shire Environment Centre.

If you add all those things up, you're looking at someone who's a very bad fit for this issue. Maybe. You can make up your minds about that.

My boss and mentor at the environment centre was this man. Bob Walshe. He was an author, educator and publisher and an absolute giant in the environmental movement. I won't take time to tell you all his accomplishments, but I can tell you that I learned a great deal from him, including how to use writing as a tool for change.

Now here's where the German came in.

- In 1996 the World Health Organisation advertised a conference called the "Biological Effects of Non-Thermal Pulsed and Amplitude Modulated RF-Electromagnetic Fields and Related Health Issues.'
- held in Munich.
- Worked in Bavaria; In a castle! It had been a magical time.
- So back to 1996, I'm desperate to get to this conference, find out about EMR, visit a few favourite places in Bavaria.
- By an absolute miracle I got some funding, a tree fell on my garage and I got some insurance money, and I made it to the conference.
- Magical time. I'm in love with this issue.

So, you can see that it was my love of German and Germany that helped catapult me into the issue of EMR.

Electromagnetic Radiation in medical fields:

- Book by Dr Robert Becker, an orthopedic surgeon, wondered why some bone fractures knitted easily and others didn't.
- Experiments with salamanders and frogs
- Minute negative field at site of injury
- Regrowth of limbs
- Difficult-to-knit bones in humans and his technique is widely used today.
- ARPANSA = Australian Radiation Protection and Nuclear Safety Agency.
- It's job = 'the Australian Government's primary authority on radiation protection and nuclear safety. ARPANSA regulates Commonwealth entities that use or produce radiation with the objective of protecting people and the environment from the harmful effects of radiation.'
- EME Reference group = a group of stakeholders
- There were representatives from government departments and the telecommunications industry and John and I represented the community. I guess I spent about 15 years on that committee.
- Thought it an opportunity to make a difference.
- The reality:
 - Mostly ignored submissions
 - 'No evidence of harmful effects'. No evidence? I'd just given him the evidence!
 - Prof Dariusz Leszczynski gave a wonderful presentation to the group about the harmful effects of radiation.
- This is how our country's government agencies dealt with scientific evidence and public concerns.
- But, on the plus side, they did provide nice food for lunch.

- 2001 =Senate Inquiry
 - Review of research into EMR
 - Examination of Australian standard

This was a huge opportunity and there were written and oral submissions to the Inquiry from members of the public and leading scientists and doctors, providing compelling evidence that electromagnetic fields caused problems.

The outcome.

- Liberal report:

- Labor report: ‘major, recent and extensive epidemiological studies have been unable to find an association between cancers and mobile telephone usage’
- Chair’s report:
 - for Australia and New Zealand
 - developed by Standards Australia
 - John Lincoln, an electrical engineer, was the Australian community representative on it.
 - This involved meeting after meeting, draft after draft, submission after submission. There was a huge amount of time and work involved.
 - The government & industry representatives wanted to change the standard to increase the amount of radiation by 5 times
 - allowed & the community representatives didn’t. There was an impasse.
 - committee split into two
 - new NZ standard passed, giving industry what it wanted.
 - job of setting the new standard was transferred from Standards Australia to ARPANSA.
 - There were more meetings & submissions
 - ARPANSA released the standard without a vote.
 - Committee railroaded.
 - EMR Alliance of Australia (EMRAA) became EMR Association of Australia (EMRAA).
 - same work - different banner.
 - Also, in 2002 my first book was published - ‘*Watt’s the Buzz?*’ - understanding and avoiding the risks of electromagnetic radiation.
 - about 5 years to write
 - for answering all those questions that people had been asking

Worked with council planners to develop a Telecommunications Development Control (DCP) plan for councils.

- a master document for council planners
- Rules about what to do for applications for base stations

Here we are at the launch and here’s my write up.

So did this change the face of telecommunications in NSW?

- telecos had a word with planners in the NSW state government
- state government introduced LEP - took precedence over DCP
- DCP that we’d worked so hard on disappeared into the murky waters of history.

It's still 2002

- committee developing a Code for the Deployment of Radiocommunications Infrastructure.
- A result of the Senate Inquiry
- to govern what telcos needed to do when designing, siting and installing mobile phone towers
- focus on communication with people
- A great idea BUT:
 - dominated by the telecommunications industry
 - community had no real say/power.
- **The pattern: Consult, ignore, consult, ignore.**
- Centre for research excellence, consortium, to conduct research on possible health effects of EMR.
- Most of Australia's available funding went to this body and its descendants
- It sounds like a good idea BUT
 - Telstra was one of the partners
 - it stopped independent scientists getting funding
 - majority research showed no harmful effects.

When it comes to harmful effects of exposure, our authorities: hear no evidence, speak no evidence, and see no evidence

ARPANSA's position:

What are the health effects from exposure to RF EME [radiofrequency electromagnetic energy]?

It's answer: Exposure to sufficiently high levels of RF EME, well above the public or occupational exposure limits, can heat biological tissue and potentially cause tissue damage. However, RF EME levels routinely encountered in the environment by the public are too low to produce any significant heating or increases in body temperature. There is no substantiated scientific evidence to support any adverse health effects from low-level exposure to RF EME associated with telecommunications and wireless technology below the limits set within the ARPANSA RF Standard.

<https://www.arpansa.gov.au/regulation-and-licensing/regulatory-publications/radiation-protection-series/codes-and-standards/rpss-1-qa>
(March 2022)

1. Changes in people's awareness:

- I've also seen changes in the community.
- There is more awareness now about this issue.
- However, people's understanding always lags behind the evolution of technology.
 - smart meters
 - WiFi.

We need to reach critical mass.

Important to Work with people who are open

- People with health problems
- People interested in health

2. Show don't tell

- Hand them the EMF meter
- Involve them in the process
- empower

In 2003, I started EMR Australia PL, to support me to continue my work.

What I've learned is that, I can use my experience (environmental), my teaching, my love of writing to make a difference. I think there are opportunities for everyone, no matter what your skill set is. There is a role for you to play and a piece of the jigsaw that only you can fill. I believe we're here for a reason.

Thank you for your excellent ideas and questions during Lyn McClean's presentation!

Chat/Meeting Notes:

Thank you for attending this meeting! These meeting notes contain views expressed by various participants, and best-efforts interpretations and summaries by a volunteer note-taker. C4ST does not necessarily agree with all statements in these notes. These notes are marked "Draft" because they are not a transcript, are not meeting minutes, and are NOT FOR DISTRIBUTION.