[name] [email]

March 28, 2023

To: Minister Steven Guilbeault, Environment and Climate Change Canada steven.guilbeault@parl.gc.ca 613-992-6779

CC: Honourable Mary Simon, Governor General of Canada

SUBJECT: REQUEST FOR FEDERAL INTERVENTION RE: CELL TOWERS PROPOSED ON BC'S AGRICULTURAL LAND RESERVE (ALR)

Dear Minister Guilbeault,

As you are aware from my correspondences of January 24 and February 23, 2023, two Telus cell towers have been proposed in my community on Vancouver Island on land in the Agricultural Land Reserve (ALR). I'm writing to request your intervention as these towers are being planned for ALR land without the most basic standards of environmental protection in place. Specifically, I write in regards to the proposed 1388 Ellenor Road tower in Comox, for which concurrence with conditions has been granted. CVRD Planning Services has not yet made a recommendation regarding the other tower proposed for 3505 Dove Creek Road, Courtenay.

It is greatly concerning that a tower could be erected in the ALR and I am writing to ask for your intervention on the following grounds:

1) Canada has no RF-EMR safety guideline for wildlife and the environment.

Therefore, there is no established measurement for assessing the impact of a cell tower on pollinators and biodiversity, both of which are so essential to a healthy agricultural sector. ISED has admitted that it lacks evidence for "considering" the impact of a cell tower on wildlife and the environment; a Freedom of Information Request for "any and all data/evidence/research studies/measurements, etc. that ISED uses to determine that siting telecommunications facilities on agricultural land will not adversely affect agricultural operations and the insects, birds, animals, plants, and trees in those areas" came back with the response "A search was completed and no documents relevant to your request were found."

REQUESTED ACTION #1: Please use this opportunity to establish a <u>long-overdue</u> RF-EMR safety guideline for wildlife and the environment.

The Canada Wildlife Act Section 3(c) states that the federal Minister of the Environment "may undertake programs for wildlife research and investigation". Please establish a program to review existing research and to authorize independent original or primary research, i.e., free from industry influence, on the effects of RF-EMR on wildlife, plants, and trees in order to establish a safe exposure guideline for non-human organisms. This process of setting safe RF-EMR exposure guidelines for biota should also include meaningful public consultation, as there are many individuals and groups across Canada who have knowledge and expertise to offer in this area.

2) There is no proof that RF-EMR is safe for wildlife and there is sufficient evidence it isn't safe.

Prevent Cancer Now and Canadians for Safe Technology published a White Paper in April 2022 entitled "Protect Birds, Bees and Trees. Include Anthropogenic Radiofrequency Electromagnetic Radiation in Canadian Environmental Protection Act Amendments", in which they summarized the peer-reviewed scientific research indicating that RF-EMR is likely a co-factor in the precipitous decline of insects and birds. https://preventcancernow.ca/wp-content/uploads/2022/04/RF-EMRinCEPA-WhitePaper-inclAmendments-PCNC4ST-UPDATED2022April7.pdf To date, no investigation has been done by the Canadian government into the possible role RF-EMR has played in the drastic decline in insects and birds. The White Paper recommends that RF-EMR be investigated under the *Canadian Environmental Protection Act* (CEPA).

REQUESTED ACTION #2: Please use your authority under the Canadian Environmental Protection Act (CEPA) to investigate the role that RF-EMR is playing in the decline of insects and birds. This investigation would include a review of existing research and the undertaking of independent or original primary research.

The Canadian Environmental Protection Act, 1999, Section 2(1)(k) recognizes the power of the government, in the administration of that act to "endeavour to act expeditiously and diligently to assess whether existing substances or those new to Canada are toxic or capable of becoming toxic and assess the risk that such substances pose to the environment and human life and health". The definition of "substances' should be expanded to include non-ionizing RF-EMR so it can be assessed to determine its toxicity to the environment and human health.

REQUESTED ACTION #3: Please amend <u>Bill S-5, Strengthening Environmental Protection for a Healthier Canada Act</u> to create a Section in the <u>Canadian Environmental Protection Act</u>, 1999 to assess and regulate anthropogenic non-ionizing radiation. This reform will require that non-ionizing RF-EMR be included in Schedule 1 List of Toxic Substances. (Recommendation from the previously mentioned White Paper on CEPA Reforms). https://preventcancernow.ca/canada-has-no-due-process-in-law-to-assess-and-regulate-wireless-radiation/

3) A cell tower risks incidental harms and warrants an impact assessment under the *Impact Assessment Act* by an assessor with expertise in EMFs, regardless of whether it is being placed on federal or private land in Canada.

Under Client Procedures Circular CPC-2-0-03 Radiocommunication and Broadcasting Antenna Systems Section 7.4, "An antenna system may not proceed where it is incidental to a designated project (as described in the Physical Activities Regulations), or is otherwise expressly designated by the Minister of the Environment without satisfying certain requirements applicable to designated projects". "Designated projects" currently do not include installations that emit RF-EMR. These regulations urgently need updating.

Amending the Physical Activities Regulations to include antenna installations that emit RF-EMR would make all cell towers proposed on ALR land subject to the *Impact Assessment Act* and would ensure that they are "considered in a careful and precautionary manner to avoid adverse effects within federal jurisdiction and adverse direct or incidental effects" (Section 6(1)(d)).

REQUESTED ACTION #4: Please set an important precedent by using your authority under Section 7.4 of the Client Procedures Circular CPC-2-0-03 Radiocommunication and Broadcasting Antenna Systems to classify antenna systems proposed on land zoned for agricultural use as "designated projects" that must be assessed for "direct or incidental effects".

Client Procedures Circular CPC-2-0-03, Section 7.4 states, "In addition to IAA requirements, proponents are responsible for ensuring that antenna systems are installed and operated in a manner that respects the local environment and that complies with other statutory requirements, such as those under the *Canadian Environmental Protection Act*, 1999, the *Migratory Birds Convention Act*, 1994, and the *Species at Risk Act*, as applicable."

It is important to note that none of these Acts address non-ionizing radiation nor infrastructure for telecommunications. "There are no assessment requirements nor recommended exposure limits with the goal to protect fauna and flora, including birds and insects, in the natural environment" (from The White Paper on CEPA reform mentioned earlier).

In particular, the 1388 Ellenor Road cell tower proposal should be assessed to ensure protection of ecosystems where ecological sensitivity is high.





Signs within 200 meters of entrance to 1388 Ellenor Road property, Comox

Migratory Birds Convention Act: In nearby fields on the Beaver Meadows Farm property, Snow Geese are known to congregate, especially along the fence line within the 500 m radius of the Ellenor Road property. The Comox Valley is one of the few areas in Canada where Snow Geese overwinter and it provides essential habitat for the successful survival of these migratory birds.

The Species at Risk Act and The Fisheries Act: There is a salmon-bearing stream on the property. An Impact Assessment could determine if there are fish and fish habitat or aquatic species at risk that could be impacted by the erection of a cell tower on the property.

Thank you for taking the time to read my letter. I would like to request a meeting with you to discuss further the issues that have been raised here.

Sincerely,

[name]

(See compilation of research below)

Research on Wireless Radiation: Effects on Wildlife & the Environment

RECOMMENDED SITES & COMPILATION OF STUDIES

- 1) White Paper developed jointly by Prevent Cancer Now and Canadians for Safe Technology proposes amendments to CEPA. "Protect Birds, Bees and Trees: Include Anthropogenic Radiofrequency Electromagnetic Radiation in Canadian Environmental Protection Act AMENDMENTS" https://preventcancernow.ca/wp-content/uploads/2022/04/RF-EMRinCEPA-WhitePaper-inclAmendments-PCNC4ST-UPDATED2022April7.pdf
- 2) https://wirelessenviroimpacts.science/ Canada's newest website on the impacts of wireless radiation on the environment. A joint project of the Environmental Health Trust, Prevent Cancer Now, and Canadians for Safe Technology.

Mentioned on this site:

- Research review by Alfonso Balmori (2021), "Electromagnetic radiation as an emerging driver factor for the decline of insects", found "sufficient evidence" of effects in insects including impacts to flight, foraging and feeding, short-term memory and mortality. https://www.sciencedirect.com/science/article/abs/pii/S0048969720384461
- The study "Exposure of Insects to Radio-Frequency Electromagnetic Fields from 2 to 120 GHz" published in Scientific Reports was the first study to investigate how insects (including the Western honeybee) absorb the higher frequencies (2 GHz to 120 GHz) to be used in the 4G/5G rollout (Thielens et al., 2018).
- 3) https://ehtrust.org/environmental-effects-of-wireless-radiation-and-electromagetic-fields/ Contains Environmental Health Trust's list of scientific citation on impacts to birds bees and trees.

Mentioned on this site:

- Low-level EMF effects on wildlife and plants: What research tells us about an ecosystem approach by Levitt BB, Lai HC, Manville AM. Frontiers in Public Health, 25 November 2022: A 3-part research review by Levitt, Lai and Manville addresses wireless frequencies now in use as well as the complex signals that will be deployed for 5G and states that "It is time to recognize ambient EMF as a novel form of pollution and develop rules at regulatory agencies that designate air as 'habitat' so EMF can be regulated like other pollutants."
 - Part 1: Rising ambient EMF levels in the environment https://pubmed.ncbi.nlm.nih.gov/34047144/
 - Part 2: Impacts: how species interact with natural and man-made EMF https://pubmed.ncbi.nlm.nih.gov/34243228/
 - Part 3: Exposure standards, public policy, laws, and future directions https://pubmed.ncbi.nlm.nih.gov/34563106/
 You can read more about this study here: https://ehtrust.org/study-

finds-wireless-radiation-affects-wildlife/

4) https://mdsafetech.org/2021/07/19/wildlife-and-biodiversity-a-disappearing-act-by-cell-towers-on-land-and-in-space/

OTHER STUDIES:

- "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", Research review by Marg Friesen & Magda Havas https://nejtil5g.dk/wp-content/uploads/2021/10/Effects-of-Non-ionizing-Electromagnetic-Pollution-on-Invertebrates-Including-Pollinators-such-as-Honey-Bees_What-We-Know-What-We-Dont-Know-and-What-We-Need-to-Know.pdf
- Study by the Swiss Federal Office for the Environment considers the connection between mobile communications and insect mortality to be probable https://www.diagnose-funk.org/aktuelles/artikel-archiv/detail?newsid=1938
 (If the site opens in German, you can click at the top to translate to English)
- German and Luxemburg Environmental Organizations Release Report on the Impact of Wireless Communications to Insects https://www.radiationresearch.org/news/german-and-luxemburg-environmental-organizations-release-report-on-the-impact-of-wireless-communications-to-insects/ "The results show that EMF could have a serious impact on the vitality of insect populations. In some experiments it was found that despite low levels of exposure to transmitters, harmful effects occurred after several months. Field strengths 100 times below the ICNIRP limits could already have effects. When planning the expansion of mobile networks, insect habitats should be protected from high-intensity EMF exposure already now."
- Functionality Disorders in Bees, Birds and Humans https://www.radiationresearch.org/wp-content/uploads/ 2018/06/021500 warnke.pdf
- Tree Damage from Chronic High Frequency Exposure (From Germany)
 <u>www.puls-schlag.org</u>, First Symposium: The effect of electromagnetic radiation
 on trees
 (Files originally in German, translated to English)
- Feature article "Is Wireless Technology an Environmental Health Risk?" has many links to studies https://www.sej.org/publications/features/wireless-technology-environmental-health-risk

PRESENTATION:

My Life for the Birds and Bats
Al Manville
Senior Wildlife Biologist, USFWS, Retired,

Adjunct Professor, Johns Hopkins University

http://www.friendsofmerrymeetingbay.org/fombnew/pages/what_we_do/events/ Speaker%20Series%202022-2023/My%20Life%20for%20Birds/My_Life_for_Birds.htm

At 20:30-23:20 time mark, Al discusses the effects of non-thermal, non-ionizing radiation on birds. At 30:00-31:00 and 33:50-34:25 time mark, Al discusses the effects of non-thermal, non-ionizing radiation on bats.

At 59.15- 1:02:30 Al talks about the 'elephant in the room': the impacts of EMF and the government's outdated regulations for EMF. At 1:01:45 he calls for RF standards for wildlife.