

FCC Comments on Notification of Inquiry,

ET Docket No. 13-84,  
Reassessment of Federal Communications  
Commission Radiofrequency Exposure Limits and  
Policies

ET Docket No. 03-137,  
FCC Proposes Changes in the Commission's Rules  
and Procedures Regarding Human Exposure to  
RadioFrequency Electromagnetic Energy.

Attached is a letter sent to:

Mr. Julius Knapp, Chief  
Office of Engineering and Technology  
Federal Communication Commission  
Washington, D.C. 20554

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Mr. Julius Knapp, Chief  
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12 pages

Dear Mr. Knapp

#### Dealing With EMR

The FCC responded September 14, 2012, to a letter we sent to Senator Grassley, requesting a White Zone and protection. The response was, however, unacceptable<sup>1</sup>. Our own plight and that of many other individuals who are made ill by electromagnetic radiation can no longer be ignored. Avoiding cell towers, smart-meters, and Wi-Fi emissions are increasingly difficult, if not impossible.

Just as most people can eat a peanut, and just a peanut can kill someone else; we cannot tolerate electromagnetic radiation. The individual, allergic to peanuts, can avoid eating them and can keep peanuts out of their home. Electromagnetic radiation (EMR) cannot be blocked out from entering our homes nor stopped from entering our property, and living spaces.

Sometimes EMR is called electro-smog. The emissions are invisible, far-reaching, penetrating, and have amplitudes (power levels) much higher than quieter, natural background radiation.

Bert and Diane own a farm in Cedar Falls, Iowa, where they lived until a cell tower was erected nearby, and Diane's life became a misery of intolerable pain. Bert continues to cautiously live and work on the farm, but Diane was forced into exile, to live a nomadic existence, until she found a safe place to live in the United State's National Radio Quiet Zone close to the National Radio Astronomy Observatory (NRAO). The FCC knows some people who are harmed by EMR (technological lepers) have gone to Green Bank, West Virginia.

This is a very serious and compelling situation. As the increasing emissions from many sources converge in the atmosphere, we are creating a soup of un-regulated and un-monitored frequencies. This man-made radiation is artificial and is totally new to the environment. Nothing – no plant, no living thing – has ever been exposed to such EMR in the life of this planet until now. Nothing is therefore adapted to it.

We urge you to undertake the following:

- 1) White Zone areas: The government and military protects delicate instruments from EMR, so how is it that human bodies don't need the same? It is urgent that those of us, who are unable to tolerate exposure to EMR, have access to or be provided with areas where we are not harmed, areas where we can safely live in a humane fashion and where we can be productive. It appears the FCC will not entertain any notion regarding regulating emissions. Will the government grant areas to be White Zones that will shield and protect us?
- 2) Housing is difficult to find in Green Bank, an unofficial White Zone. Perhaps housing may be offered as will likely be for victims of Hurricane Sandy or the Nor'easter? Help is needed for those in forced exile too. Perhaps residences in and around the military base of Sugar Grove, which may be (according to rumors) partially shutting down? For some people the choices are to live in a car (to reduce harm) or to return to exposure (to risk harm, to live with continual pain or to possibly be willing to die because there is no relief). This is unjust.
- 3) The Department of Justice needs to recognize technological leprosy<sup>ii</sup> as a disability. Basic civil services cannot be used if the services continue to promote harmful emissions; which cause even more struggles for – those who already have had their lives changed or those whose disabilities are not recognized.
- 4) Keep NRAO. Did the EMR industry influence NSF into closing NRAO? Is this another way to cause harm to technological lepers, because we are viewed as a threat to the EMR industry? Because we are asking for White Zones, is this a way for the EMR industry to prevent Green Bank becoming a White Zone? The economics from NRAO is needed here for residents and those in forced exile.
- 5) Technological lepers need the FCC and the FCC needs technological lepers. People who detect harmful EMR emissions, are useful and irreplaceable.
- 6) Within the FCC and the U.S. government, is there anyone who is a technological leper? How many technological lepers work there? Have there

been people who wished to visit or attend meetings but because they are technological lepers and become harmed when exposed, they cannot be present? How many people worked for the FCC and the U.S. government and had to leave because they became technological lepers? Were changes made so technological lepers could continue working and be productive?

- 7) Put people first. Where is the Precautionary Principle? Can industry, businesses, users of EMR, as well as the FCC be likened to undisciplined orphans?

Undisciplined orphans: without parental guidance, doing as they want, self centered – acting for their own interests or gain, putting EMR everywhere, injuring others, hiding information, not taking responsibility, and no one to control them.

- 8) Technology seems to be addictive. Many addicted users of EMR do little else. Possibly, because it is so addictive, they deliberately ignore the harm their actions are causing to others and even to themselves. It seems the addicting pay, rewards, wins, tweets, become the selected activity, even when people, including the users, are sensing something is wrong (i.e. headaches, numb fingers, forgetfulness, diabetes, dizziness, etc.). They become angry and sometimes abusive when there is interference.

Promote the Precautionary Principle.

- 9) Give power to government agencies to protect technological lepers. Tighten the reins to the powerful EMR industry and EMR economy. Technological lepers are not safe and cannot live in peace, when they become injured by EMR emissions in their homes, outdoors on their own properties, at work, at school, and where their families or friends spend time.

During holidays, it is difficult to reach out to others (i.e. friendship, giving, helping, sharing, celebrating) when an isolated person needs just the basics i.e. food, warmth, and a place to live.

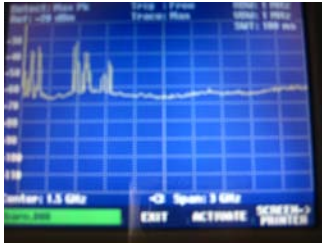
Give power to government agencies to put people first. Technological lepers need to have guaranteed safe places to live, to function, to survive, to be productive and to celebrate life.

- 10) Distribute credible meters to detect, measure, and record invisible, penetrating: electrical fields, magnetic fields, non-ionizing radiation, and ionizing radiation. It's not just enough to be told that everything is well and it would seem the wireless institutions are not out for our well being. Without meters, it may be claimed EMR does not exist. Building the meters and measuring environments could become valuable detective research businesses. See endnote<sup>iii</sup>

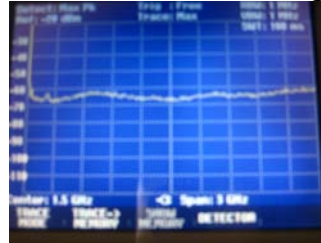
- a) We need to know and be actively aware of what invisible emissions we are living / working / sleeping in on a daily bases. Look at the differences

recorded between

Cedar Falls, Iowa 1996 (left) and Green Bank, West Virginia 2012 (right).

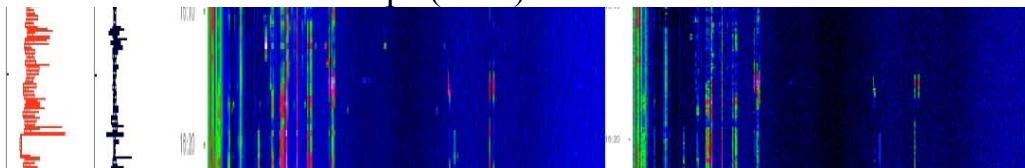


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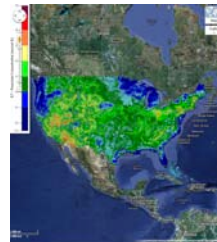
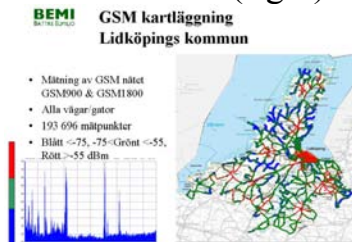
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- b) Emissions logged over while driving, example: document changes in exposure. Electrical fields, magnetic fields, non-ionizing radiation. Time is vertical. Horizontal is frequency, color is amplitude (power level). Twenty second max hold and sweeps (trace). GPS coordinates were also recorded.



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- c) Map EMR within towns, cities and rural areas. Two examples: BEMI by Tegenfeldt (left, he did this as a profession) and map of potassium concentrations (right)



Google

- 11) The EMR industry and our government do not seem to be responsible nor respectful. This is fundamental as most business models still do not recognize or take in to account any consideration for the people. Industry and government agencies repeatedly referenced the FCC. As Diane was being harmed, and requested that emissions be checked, the FCC and government agencies contacted would not do so.

- 12) Wrong assumptions:

- a) Assuming technological lepers react to all frequencies, is false.
- b) Assuming the emission from one cell phone equals or mimics all frequencies is false.

One cell phone does not produce all frequencies.

Technological lepers are individuals, they are not the same. Some technological lepers may be harmed by frequencies others can tolerate and vice versa.

Were technological lepers injured by a single frequency, several frequencies,

other exposures? Were these continual or pulsing? To understand this more, use meters to investigate the unknown frequency at the time and under what conditions. Measure cellular changes, blood changes, heart changes, eye changes, headaches, skin changes, and more effects.

A few technological lepers become disabled when exposed to more than just several frequencies. Over time, observers need to learn what are the unknown frequencies. Questions: is it a combination of frequencies? Are frequencies modulated or pulsed? Is there something else (i.e. a chemical) present?

Technological lepers do not need meters to know what they detect or when they are being harmed. Meters are needed in such places as churches, cities, hospitals, government places, so others (officials or people) may verify and learn what technological lepers are physiologically reacting to.

- 13) EMR detective research: Measure frequencies (*all* frequencies) in the environments where people are harmed.

One technological leper, identified pain – the same pain when exposed to EMR. Two meters showed no emissions from cell phone nor Wi-Fi. The technological leper definitely felt pain and felt certain there was EMR in that environment. A third meter, measuring more frequencies, displayed a powerful emission about 24 GHZ, not of cell phone nor Wi-Fi frequencies. The technological leper was right. If this had been a research study, a report would have incorrectly attributed the pain as imaginary, psychological, or to a nocebo. Could this be a flaw in some research reports?

There are many symptoms (Bevington, 2012) and , many frequencies, and people are not alike. One needs to go to an individual's environment and measure the electromagnetic radiation of *all* the frequencies in the environment.

- 14) Allocate dollars for research. While industries will fund their own conclusions, often we the people of this country are the only advocates who can stand up for what is happening. A few research ideas were suggested in “EMR detective research” and other research ideas are in the endnote.<sup>iv</sup>
- 15) Don't phase out telephone lines or the U.S. Postal Service. Wired telephones and the U.S. Mail and direct contact are often the only access to people in exile. What would be used if EMR were to be discontinued?
- 16) Is anyone aware of a developing problem – Twitter, Facebook, email, “.com“ etc. are the only contacts acceptable. When computer usage is required, access is not possible for people harmed or disabled by EMR because being near electronic devices is unbearably harmful for many technological lepers. Require quick access (not always the case with automated telephones) via telephone and U.S. mail with competent people accessible.
- 17) The FCC disregarded testimonies – people reporting harm they witnessed, harm they experienced, and research finding health effects (EMR-Policy-

Institute, 2009a) (EMR-Policy-Institute, 2009b). In a 2012 letter, the FCC did not cite documents correlating health effects from EMR exposure such as: (WHO International Agency for Research on Cancer, 2011), (McCarty et al., 2011), (Rea et al., 1991), or research papers written by Dr. Olle Johansson, Dr. Henry Lai, Dr. Samuel Milham, Dr. Andrew Marino, Dr. Magda Havas.

- 18) The FCC enclosed a biased study in their reply. The study of literature by Rubin seems “Cherry picked”; see (Havas, 2012).
- 19) The FCC would not come to document the toxic environment as Diane was being harmed. They repeatedly informed us either a) the cell tower is safe or b) there are no health effects. Harm from EMR is real; protection for people from EMR has not been obtained but is needed.

Injury from EMR is real. Living in our Iowa home, Diane became ill, eventually overexposed from the emissions of a newly built cell tower. If living at home had been safe, Diane wouldn't have been forced into exile, away from Bert, away from co-managing their research farm business, nor would they have written this letter.

The above requests and requests in the addendum are urgent. The time to act was yesterday, but regulatory action is still possible.

Respectfully Yours,

Diane Schou, Ph.D.

Bert Schou, Ph.D.

Enclosures: The WHO International Agency for Research on Cancer. IRAC classifies radiofrequency electromagnetic fields as possibly carcinogenic to humans. Lyon, France: World Health Organization. 2011. (page 1 of 6). Havas M. Science 101: Cherry picking & black swans. 2012 with link to You Tube (please view this).

Cc: Senator Grassley, FCC comments on notification of inquiry dockets 13-84 and 03-137, Senator Harkin, Representative Braley, Senator Rockefeller, Senator Manchin, Representative Rahall.

Bevington, M. (2012). *Electromagnetic Sensitivity and Electromagnetic Hypersensitivity (also known as Asthenic Syndrome, EMF Intolerance Syndrome, Idiopathic Environmental Intolerance - EMF, Microwave Syndrome, Radio Wave Sickness) A Summary*. London: Capability Books.

EMR-Policy-Institute. (2009a). In the Matter of A National Broadband Policy for Our Future: EMR Policy Institute Comment. In FCC (Ed.), (pp. 485). P.O. Box 117 Marshfield, VT 05658: Federal Communications Commission GN Docket 09-51.

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<http://www.magdahavas.com/science-101-cherry-picking-black-swans/> You Tube: <http://www.youtube.com/watch?v=QyzZX-bCiqs>.

McCarty, D. E., Carrubba, S., Chesson, A. L., Frilot, C., Gonzalez-Toledo, E., & Marino, A. A. (2011). Electromagnetic hypersensitivity: Evidence for a novel neurological syndrome. *Int J Neuroscience*. doi: 10.3109/00207454.2011.608139

Rea, W. J., Pan, Y., Yenyves, E. J., Sujisawa, I., Samadi, N., & Ross, G. H. (1991). Electromagnetic field sensitivity. *J Bioelectr*, 10, 241-256.

WHO International Agency for Research on Cancer. (2011). IRAC classifies radiofrequency electromagnetic fields as possibly carcinogenic to humans. Lyon, France: World Health Organization.

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<sup>i</sup> The FCC cited and sent a paper by Rubin. Nicols Fox, harmed by electromagnetic radiation, noted “The paper the FCC enclosed was biased. Search for another paper also written by Rubin which appeared in the British Medical Journal in 2006 (Rubin JG, Hahn G, Everitt BS, Cleare AJ, Wessley S. Are some people sensitive to mobile phone signals? Within participants double blind randomized provocation study. *Br Med J*. 2006;332:886-91). The abstract to this study appears to show that EMR is psychological in origin. However, a close search of the entire study would demonstrate its weakness. For example, truly ES individuals would have been eliminated as subjects by the fact the study was conducted in a) an urban area, b) a modern office building, c) an office furnished with modern office equipment. Any of these would have been a deterrent to the participating of sensitive individuals.”

A paper verifying health effects, McCarty, D. E., Carrubba, S., Chesson, A. L., Frilot, C., Gonzalez-Toledo, E., & Marino, A. A. (2011). Electromagnetic hypersensitivity: Evidence for a novel neurological syndrome. *Int J Neuroscience*. doi: 10.3109/00207454.2011.608139. This paper may have precipitated the media and the BBC to interview people harmed by electromagnetic radiation.

<sup>ii</sup> Technological leprosy is not a contagious virus – it is a name created to portray the nomadic living conditions experienced by people harmed / injured / disabled by – EMR. To avoid



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symptoms linked to EMR exposure (Bevington, 2012), technological lepers avoid areas with cell towers, Wi-Fi, smart meters, battery run devices, power lines, etc.; they shy away from people (who carry, wear or use technological devices), and avoid crowds. Many technological lepers experience stigmas of being shunned, abused, harassed, bullied, excluded, and threatened.

Even in remote areas refugees gather, technological lepers find they still need to be cautious. As individuals, they are not the same; some may react to frequencies others can tolerate and vice versa.

Names for this condition include: electromagnetic hypersensitivity, EHS, electromagnetic sensitivity, EMS, electrical sensitivity, ES, microwave sickness, radio wave sickness, idiopathic environmental intolerance, IEI, EMF sensitivity.

Idiopathic is misleading. Illness, sickness, intolerance, or sensitivity portrays there is something wrong with our bodies, we have been injured. Radio-wave sickness implies one is harmed by AM or FM radio frequencies and not harmed by electrical fields, magnetic fields or frequencies above radio bands. Electromagnetic hypersensitivity implies one can tolerate non-ionizing radiation but not electrical or magnetic fields.

Technological lepers have been injured, harmed, disabled, poisoned, overexposed, and are victims from EMR emissions.

More suitable descriptions include: electromagnetic radiation disabled, electromagnetic radiation injured, electromagnetic radiation wounded, harmed by electromagnetic radiation, overexposed to electromagnetic radiation, electromagnetic radiation poisoned, or electromagnetic radiation victim. These descriptions might be too long, use many words, and people generally do not grasp the concept of EMR.

No one wished to be a technological leper (both disabled and the words). When “technological leprosy” is used, many people immediately understand, make changes, and take precautions to protect us.

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iii Build meters and antennas to measure: the electrical fields, contaminated (dirty) electrical fields, magnetic fields, frequencies of non-ionizing radiation (to study all frequencies, combinations of frequencies, pulsing or modulation), ionizing radiation (Fukushima, etc.), GPS coordinates, date and times. Build the meters to record and save. Build transportable meters that are accurate, easy to use and easy to understand. Build meters to log emissions over time. Build meters that are similar to black boxes in aircraft and easily accessed for use in vehicles. Build meters that could have revealed EMR influence before and during events such as the Detroit marathon. Build meters that log EMR exposure levels and changes when errors occur in operating rooms. Include EMR meters in black boxes to document when pilots make errors in aircraft. Build meters to report EMR levels and changes when vehicle accidents occur. Install meters in environments where learning or alertness is important, Build meters to measure EMR in environments where people become ill. Build meters in environments where poor decisions are made.

Build meters to map EMR in towns, cities and rural areas. Maps of EMR are helpful for people and officials to compare health effects and location or time of environmental exposures. Maps help people decide where to live. Maps warn of unsafe environments. Get measurements of emissions published and available to people. Build meters to record photos of locations as well as emissions, GPS coordinates, and time.

iv Research questions from a technological leper:

- Do EMR environmental conditions affect abilities to multi-task? To react quickly? Document changes or accumulations of EMR, look for trends, note incidences, to avoid future disasters. It is not likely the contaminating EMR in the environment can be reliably measured after the fact. If a logging meter were working before, during, and after, precautions could be places to avoid future problems.
- What were the EMR environmental conditions when: a) the airport control tower operators fell asleep? b) pilots forgot to land at the Minneapolis Airport? c) control tower error, planes too close? d) it was unusual that three healthy marathon runners died in Detroit; isn't it suspect when two runners died at the same time, and two runners died at the same location? e) increased suicides by military personnel who were not deployed? f) surgical errors increased at a Rhode Island hospital? Was EMR involved in any of these? Harm can be direct, indirect, or both.
- Where does the radiation created go? Where is it absorbed? Exposed / not exposed / exposure over time: changes in plants, changes in plant location, changes in animals, changes in insects. Is Earth absorbing some and rebelling? Exposed / not exposed / exposure over time: changes in DNA, changes in viruses, changes in the blood brain barrier, changes in blood. What are time frame trends for people to be harmed? How can exposure accumulations be measured? What are the time frames for technological lepers to be healed when not exposed?

## IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS

Lyon, France, May 31, 2011 -- The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as [possibly carcinogenic to humans \(Group 2B\)](#), based on an increased risk for [glioma](#), a malignant type of brain cancer<sup>1</sup>, associated with wireless phone use.

### Background

Over the last few years, there has been mounting concern about the possibility of adverse health effects resulting from exposure to radiofrequency electromagnetic fields, such as those emitted by wireless communication devices. The number of mobile phone subscriptions is estimated at [5 billion globally](#).

From [May 24–31 2011, a Working Group of 31 scientists from 14 countries has been meeting at IARC in Lyon, France, to assess the potential carcinogenic hazards from exposure to radiofrequency electromagnetic fields](#). These assessments will be published as Volume 102 of the IARC *Monographs*, which will be the fifth volume in this series to focus on physical agents, after [Volume 55](#) (Solar Radiation), [Volume 75](#) and [Volume 78](#) on ionizing radiation (X-rays, gamma-rays, neutrons, radio-nuclides), and [Volume 80 on non-ionizing radiation \(extremely low-frequency electromagnetic fields\)](#).

The IARC Monograph Working Group discussed the possibility that these exposures might induce long-term health effects, in particular an increased risk for cancer. This has relevance for public health, particularly for users of mobile phones, as the number of users is large and growing, particularly among young adults and children.

The IARC Monograph Working Group discussed and evaluated the available literature on the following exposure categories involving radiofrequency electromagnetic fields:

- occupational exposures to radar and to microwaves;
- environmental exposures associated with transmission of signals for radio, television and wireless telecommunication; and
- personal exposures associated with the use of wireless telephones.

International experts shared the complex task of tackling the [exposure data, the studies of cancer in humans, the studies of cancer in experimental animals, and the mechanistic and other relevant data](#).

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<sup>1</sup> [237 913 new cases of brain cancers](#) (all types combined) occurred around the world in 2008 (gliomas represent 2/3 of these). Source: [Globocan 2008](#)

## SCIENCE 101: CHERRY PICKING & BLACK SWANS



July 26, 2012. When I am asked to testify as an **expert witness** at a hearing, I am asked to submit a written document that will accompany my oral testimony. The question I address in my expert testimony is, "What scientific evidence do we have that this form of energy (low frequency electromagnetic fields, radio frequency radiation, or whatever) is harmful below guidelines?"

But that is not the question **adjudicators** want to hear. They want scientists to present a review of ALL literature so they can decide for themselves even though they are not qualified to address that question—no matter how brilliant they may be—if they don't understand the scientific method. **There is a disconnect between the legal system and the scientific method** and *weight-of-evidence* and *falsifiability* are two areas where the legal system fails to understand science.

**Journalists** often make the same mistake and label scientists as being biased or having preferences when they present information showing that something is harmful without presenting the same number of studies showing that something is safe.

Unfortunately, **policy makers** fall into the same category. *They just don't get it!* And—because *they don't get it*—we have a lag in critical policy decisions that need to be made in a timely fashion. The result is that guidelines remain non-protective for much longer than necessary.

One key that gives this away are statements using the "**c-words.**" What are "c-words"? *Conclusive, consistent, convincing* often placed before the word "evidence" and preceded by the word "no".

A typical statement might be, "We have no conclusive, consistent, convincing evidence that bla-bla-bla is harmful below guidelines." As soon as you hear these words you recognize that evidence does exist but the person making

this statement doesn't hold that evidence in high regard. That person seldom expands by indicating what kind of evidence would be classified as *conclusive*, *consistent* or *convincing*, because if that evidence were available s/he would be in a quandary.

Science has a way of dealing with this "confusion" (another c-word) and that is the concept of falsifiability coined by Sir Karl Popper, one of the leading and most influential philosophers of science in the 20th century.

That concept is explained in a 10-minute video entitled "Science 101: Cherry Picking & Black Swans." Click [here](#) for link to video and send it to your favorite journalist, policy maker, and lawyer who deal with issues that involve science.

<http://www.magdahavas.com/science-101-cherry-picking-black-swans/>

<http://www.youtube.com/watch?v=QyzZX-bCiqs> View this You Tube