

April 14, 2022

Senator Michael J. Rodrigues, Chair Senate Committee on Ways and Means 24 Beacon Street, Room 212 Boston, MA 02133

Dear Senator Rodrigues and Members of the Senate Committee on Ways and Means,

You have before you a bill critically urgent to the Commonwealth's public safety and climate change efforts: Senator Cyr's <u>S.186 Resolve relative to disclosure of radio frequency</u> notifications.

## The Backstory

When my daughters were in school, we kept hearing about the 21st Century Classroom and how our children would need this new technology to succeed in today's world. Our town budgets could not afford this so I spent eight years fundraising to bringing wireless technology into Ashland Public Schools as the President of the Ashland Education Foundation and later as the district's grant coordinator. I was honored to serve alongside Senator Spilka in these efforts.

Then an electrical engineer friend tipped me off there could be biological harm from the electromagnetic fields (EMFs) of radiofrequency microwave radiation used to carry the signals and data back and forth between our devices and the routers and cell towers with which they communicate.

I am a technical writer by trade so I began to research the peer-reviewed science and was astounded to discover there are literally thousands of studies all over the world documenting extensive harm to both people and the environment. Then I tried to help others:

First, through a long and difficult School Committee process in 2014, I helped Ashland Public Schools become the <u>first in the nation</u> to implement Best Practices for Mobile Devices. Although we have a sign hanging in all of our classrooms to turn off the devices and the wi-fi when not in use, they are not enforcing it and the children continue to be radiated. Our administrators are waiting for higher authorities to tell them to remove this electropollutant from the classroom.

Second, after three attempts I secured a grant to place a <u>radiofrequency radiation (RF) detection</u> <u>meter on loan</u> in the Ashland Public Library so residents can measure these invisible exposures and safeguard their loved ones. This has become a model program deployed by the Newton and Pittsfield libraries, and others across the country.

Third, I showed Senator Spilka and Puja Mehta the science and <u>Ashland's school sign</u>, then measured the radiation coming off of Karen's cell phone and Puja's laptop. Both devices sent the RF meter off the charts into to the red zone. Senator Spilka put me with **Aaron Carty** and together we wrote the nation's first commission bill to investigate wireless radiation. It was assigned to the Joint Committee on Public Health in 2015.

I arranged for world leading EMF scientists, doctors, public health experts, technologists and injured citizens to send in testimony. The bill was advanced by Public Health but sent to study by Health Care Finance. In 2017, Karen introduced the bill as a Resolve under her own name and again it advanced but Senate Ways and Means sent it to study. In the third session Karen was elected Senate President and no longer introduced legislation.

# **Senator Cyr's Bills**

Fortunately, by then, Senator Cyr had introduced two bills to address wireless radiation risks too. One would form a commission and the other would protect children from handheld devices.

Did you know the current <u>Resolve S. 186</u> was written by the Joint Committee on Consumer Protection and Professional Licensure? When Senator Cyr first filed these bills in 2017, I once again arranged for world leading doctors, scientists, technologists and injured citizens to send in testimony.

When Consumer Protection saw the evidence of harm coming in and after I walked Chairs L'Italien and Chan through the issue, they assigned a research analyst to investigate further. Jay Santos asked what I considered to be the top 10 reasons to pass these bills and I provided him with a list.

They did their due diligence and verified the facts, then in 2018 Consumer Protection wrote  $\underline{S}$ .  $\underline{2431}$  to form a commission to investigate wireless radiation. Although the bill has been voted out of committee favorably each session since, it has failed to pass.

In the meantime, Massachusetts began battling unprecedented epidemic proportions of anxiety, depression, insomnia and other mental health deteriorations in both children and adults. Our pollinators began to disappear, climate change escalated. The science shows wireless radiation is a major contributing factor. It is a neurotoxin and it kills insects, and wireless systems consume 10x more energy than the responsible technology solution of fiberoptics to and through the premises.

Yet Massachusetts continues to allow the wireless industry to immerse our families and environment in electropollution at alarming rates. The message is not no technology, it's safe technology, and we know how to get there.

Much has advanced with wireless radiation science, public policy, and legal actions since 2017 when Consumer Protection wrote what is now before you as Resolve S. 186.

Here are today's top 10 urgent reasons to pass <u>Resolve S. 186</u> and form an expert commission this session, perhaps as an emergency measure:

#### 1. Massachusetts Used to Lead the Nation

We are falling behind. For nearly a decade Massachusetts led the nation with many bills to address the wireless radiation issue. This session alone, we have 20 bills filed to form a commission to investigate, protect children in schools, require a no-fee opt-out from utility "smart" meters and more.

Our public record is solidly populated with the facts to enable you to act to protect the Commonwealth. Here is a <u>600-page compilation of testimonies</u> I produced in 2018 and gave to Senator Spilka and Dennis Giombetti. I will forward under separate cover many of the testimonies that have come in this session too so you are empowered with the current public record on wireless radiation risks and remediation solutions.

In ten years Massachusetts has yet to pass a wireless radiation bill. However, armed with the same facts as we've brought forth in the Commonwealth, **New Hampshire passed a law to investigate in just seven months**.

# 2. New Hampshire's Groundbreaking Commission Report

New Hampshire has already done the hard work to enable Massachusetts to now follow suit.

Citizens harmed by wireless radiation introduced NH Rep. Patrick Abrami to the science. He is an engineer, and as such had only been taught you must have heat from a wireless antenna to have harm. The FCC public radiation limits were set in 1996 to these thermal, or heating effects and that is what is still in place today.

Rep. Abrami did his due diligence though and personally began investigating the peer-reviewed scientific literature. He discovered a vast body of science showing extensive harm at the non-thermal level, meaning our FCC guidelines allow far too much radiation to protect the public or the environment.

He then met with me and his constituent and we helped him connect the dots further on the magnitude of wireless harm.

In 2019, Rep. Abrami introduced NH HB.522, a bipartisan bill to form a commission to answer the following eight questions:

- 1. Why does the <u>insurance industry</u> recognize wireless radiation as a leading risk and has placed exclusions in their policies not covering damages by the pathological properties of electromagnetic radiation?
- 2. Why do cell phone manufacturers have in the <u>legal section</u> within the device saying keep the phone at least 5mm from the body?
- 3. Why have 1,000s of peer-reviewed studies, including the recently published U.S Toxicology Program 16-year \$30 million study, that are showing a wide range of statistically significant DNA damage, brain and heart tumors, infertility, and so many other ailments, been ignored by the Federal Communication Commission (FCC)?

- 4. Why are the FCC-sanctioned guidelines for public exposure to wireless radiation based only on the thermal effect on the temperature of the skin and do not account for the non-thermal, non-ionizing, biological effects of wireless radiation?
- 5. Why are the FCC radiofrequency exposure limits set for the United States 100 times higher than countries like Russia, China, Italy, Switzerland, and most of Eastern Europe?
- 6. Why did the World Health Organization (WHO) signify that wireless radiation is a <u>Group B Possibly Carcinogenic to Humans</u> category, a group that includes lead, thalidomide, and others, and why are some experts who sat on the WHO committee in 2011 <u>now calling for it to be placed in the Group 1, which are known carcinogens</u>, and why is such information being ignored by the FCC?
- 7. Why have more than 220 of the world's leading scientists signed an <u>appeal to the WHO and</u> the <u>United Nations</u> to protect public health from wireless radiation and nothing has been done?
- 8. Why have the **cumulative** biological damaging effects of ever-growing numbers of pulse signals riding on the electromagnetic sine waves not been explored, especially as the world embraces the Internet of Things, meaning all devices being connected by electromagnetic waves, and the exploration of the number of such pulse signals that will be created by implementation of 5G technology?

Following compelling expert testimonies akin to what we have in MA, the NH House Committee on Science, Technology and Energy advanced the bill to the Senate Committee on Health and Human Services which also voted it out favorably. Governor Sununu signed HB. 522 into law and within seven months of the bill's introduction New Hampshire formed a commission composed of highly qualified medical doctors, scientists, physicists and engineers as well as state agency representatives and members of the wireless industry.

They reviewed thousands of peer-reviewed studies from all over the world documenting very serious biological harm to children, adults and the environment, from low-level, non-thermal, non-ionizing exposures and posted their findings on the NH <u>State website</u>.

In a publicly transparent process, they also interviewed world-leading microwave radiation scientists and doctors, the retired President of Microsoft Canada, World Health Organization advisors, and industry representatives as well.

They repeatedly invited the FCC and FDA to meet with them and our federal agencies refused, signaling that this issue needs to be addressed at the state level. Investigation revealed these agencies are <u>captured by industry</u>.

Even during the COVID-19 pandemic, New Hampshire kept the wireless investigation a priority and their work culminated in the groundbreaking <u>New Hampshire Final Report on Commission to Study the Environmental and Health Effects of Evolving 5G Technology</u>.

The 390-page report is thorough yet easy to read. The Summary and Recommendations are all in the firsts 17 pages and the bulk of the document is comprised of the appendices which

contain the science and other supporting facts, as well as minutes from their 13 publicly accessible meetings.

The report also contains a minority report written by industry in pages 18-27 before the appendix begins. This is the industry playbook which the majority of commission members saw right through after investigating the facts. The minority report is something of a gift though, as it contains the messaging routinely given by wireless representatives to our towns, legislators and the public. Commission members Senator Denise Ricciardi and Dr. Paul Heroux counter many of the points of disinformation from the minority report on pages 384-5 of the electronic copy, or pages 5 and 6 of 11 in the final meeting minutes of Appendix O.

New Hampshire makes 15 recommendations to engage federal delegates to protect the public and the environment, and in the meantime at the state level educate the public, label all RF emitting equipment, measure exposures, establish setbacks, and begin transitioning away from harmful wireless technology to fiber to and through the premises.

The NH commission report is the strongest fact-based investigation in the nation. In December 2020 the European Parliament began an <u>investigation into wireless radiation</u>, especially 5G. They held a two-hour session with six representatives from industry and science. In the final minute the moderator recommends emulating the <u>NH commission's process</u> and <u>report</u>.

The New York legislature now has <u>S.5926</u> and <u>A.06448</u> to emulate the New Hampshire report, and many <u>other states</u> have made inroads toward responsible technology too.

MA would do well to get going on this ASAP. We are falling behind and it is showing in the declining health of our populace and environment.

Note: the Oregon legislature tasked the Oregon Health Authority (OHA), through an <a href="mailto:emergency law">emergency law</a>, to investigate wireless radiation, especially as it impacts children in schools. A good report was drafted at the same time NH did its review, but unfortunately, as an <a href="mailto:in-depth">in-depth</a> journalism <a href="mailto:investigation">investigation</a> reveals, the credible science was scrubbed from the final report by industry-friendly OHA authorities which has left Oregon's children immersed in toxic levels of radiation – just as Massachusetts' children are today.

New Hampshire has taken next steps and in January introduced <u>HB. 1644</u> to begin implementing the commission's report recommendations, starting with prohibiting new cell towers or small cells within 500 meters /1,640' of homes, schools, parks, medical facilities, senior centers, etc. That is the distance where the <u>science indicates the increased death rate</u> slope begins to go down. The bill also establishes an industry funded state-level registry of harm.

Following public testimony their House Committee on Science, Technology and Energy unanimously voted not to kill the bill, and has formed a bipartisan 8-member Interim Study committee to decide how to move forward. They will execute their work starting this spring.

#### 3. Legal Actions:

In 2019, when the FCC ignored  $\underline{11,000 \text{ pages}}$  of scientific, medical and citizen evidence of harm entered into the public record and reaffirmed its toxic levels of public radiation exposure, the FCC was sued by the Environmental Health Trust and others.

In August 2021, the 9th District Circuit Court of Appeals in D.C. ruled the FCC was arbitrary and capricious in its decision to continue to expose the public to today's levels of wireless radiation and remanded it back to the FCC to reassess their radiation limits, especially as they impact children and the environment. This is where it stands today, the proverbial fox still watching the hen house.

Knowing the FCC will aim to drag this out indefinitely, the non-profit Americans for Responsible Technology has consulted with leading attorneys in telecom law and filed an <a href="Imminent Hazard">Imminent Hazard</a>
<a href="Petition with the FDA">Petition with the FDA</a>. Massachusetts resident and business owner Robert Strayton is a copetitioner as he was injured by a cell tower installed next to his home in Chappaquiddick.

The Massachusetts Association for Boards of Health now includes cell tower risks in the last four pages of the **Legal Handbook** and Public Health Guidebook for Massachusetts Boards of Health.

There are many Massachusetts lawsuits too, here are a few examples:

- Citizens in **Hull** are trying to protect their homes from 5G small cell installations
- Pittsfield residents have sued for lack of proper notification to residents of applications for cell towers
- Parents in Southborough sued under ADA for the harm done to their son by the wireless radiation emissions at the prestigious Fay School; for the first time in U.S. history, the courts recognized biological harm at the non-thermal level; Rep. Carolyn Dykema has had bills for years to protect all students in schools, see this session's H. 115.
- Cambridge successfully won a suit when industry failed to adhere to due process
- Boston joined mayors in other states in suing the FCC and wireless industry for usurping local control
- Cape residents worked with **Barnstable** to sue for protections from close-range cell antennas mounted in a church steeple
- Ashfield residents successfully sued to stop a cell tower

Please know Boston has been trying to avert wireless risks for years. In 2013, the cities of <u>Boston and Philadelphia filed a submission</u> to the Federal Communications Commission (FCC) (Dockets <u>#13-84</u> and <u>#03-137</u>) that accused the FCC and federal health agencies of negligence for failing to investigate whether electrosensitive persons are harmed by wireless radiation.

In 2020, the City of Boston filed a submission to the FCC's 19-226 docket stating, "Boston believes that the concerns of the public are real and that the Commission has done a disservice to itself, local government, consumers, and even the wireless industry in failing to understand and respond to the broadly shared mistrust of the safety of RF emissions." See the  $\underline{\text{full}}$  submission here.

Many towns in Massachusetts are rising up against harmful utility "smart" meters as well as close range cell towers and small cell antennas being imposed in their communities. See the <a href="News">News</a> page at Massachusetts for Safe Technology for articles from communities across the Commonwealth. See also the <a href="Events">Events</a> page for educational forums and performances being held to educate the public.

## A few examples are:

- Residents worked with their town in **Lenox** to stop cell tower antennas from being installed on top of The Curtis, the state-owned housing for senior citizens and the disabled
- Citizens in Wayland years ago worked with their town to put a 900' setback in their zoning code to protect residential areas, which allowed them to lawfully deny an industry application in recent years to put a cell tower on their rod and gun club, which abuts a neighborhood.
- Burlington, MA adopted a small cell policy requiring all 5G antennas to be recertified each
  year and the vendor would have to pay for it. Verizon withdrew their small cell applications.
  Americans for Responsible Technology incorporated this into their sample ordinance being
  brought by citizens to their municipalities all over the country.
- **Dover-Sherborn** parents staved off two cell towers on the high school
- Westwood parent succeeded in having the schools refuse to renew cell tower leases on the roof of the middle school
- Pittsfield, after a two-year investigation, this week broken ground as the first Board of
  Health in the nation to issue a cease-and-desist order to Verizon to remove a cell tower
  activated the first week of the pandemic. Children and adults immediately became ill and
  symptoms worsened over time to the point where residents have had to abandon their
  homes. The pollinators have also disappeared. Rep. Patricia Farley-Bouvier lives in this
  neighborhood and testified before the Joint Committee on Consumer Protection and
  Professional Licensure on the need for Massachusetts to address the wireless issue.

Our citizens and towns should not have to fight these battles. The Commonwealth needs to take a stand to protect all citizens from wireless radiation. Passing S. 186 ASAP would be a good start.

## 4. Havana Syndrome & Public Exposures

Much has been reported lately on <u>Havana Syndrome</u>, where U.S. diplomats and their families have experienced extensive harm from microwave radiation exposures.

This is the SAME microwave radiation deployed widely today in the public sector via wireless technology. Harmful electromagnetic fields (EMFs) of radiofrequency microwave radiation are continually pulsed from our own cell phones, earbuds, routers, tablets, laptops, wearables, baby monitors, gaming devices, Roku, Chromecast, Alexis, appliances, automobiles and all electronics geared for the Internet of Things (IoT).

At the community level, this radiation is emitted 24x7 from <u>utility "smart" meters</u> for electric, gas, propane, water and solar systems. Toxic emissions are constantly radiated by <u>cell towers</u> plus macro cell antennas mounted on buildings. The electropollution is growing exponentially with <u>5G small cells</u> being installed at bedroom height *inside* neighborhoods in the public accessway. 5G adds a whole new layer of harmful beam-forming radiation on top of the existing 3G and 4G pulses, upping the total body burden of electropollution to new heights.

Our bodies did not evolve to adapt to these extremely high levels of man-made radiation, and with constant exposure we can never get a break to do proper cell repair and regeneration.

#### 5. The Science: Human Harm

Wireless technology was developed for use by our militaries, starting with radar systems and then biological warfare. Now <u>declassified military studies</u> indicate our government knew of the biological harm decades ago, long before wireless technology products were sold to the public.

The industry has known too. See this <u>2000 report from T-Mobil</u>, the German parent company of our T-Mobile.

<u>The science</u> has continued to advance and thousands of peer-reviewed studies published in highly credible journals report wireless radiation causes cancers, DNA damage, infertility, ADD/ADHD, autism, and Alzheimer's disease coming on at earlier and earlier ages.

In the short-term, the science documents wireless radiation is a neurotoxin and immunosuppressant which contributes significantly to our escalating rates of **anxiety**, **depression**, **anger**, **insomnia**, **headaches**, **nosebleeds**, **pain**, **nausea**, **skin abnormalities**, **heart irregularities**, **cognitive impairment and behavior issues**.

The science indicates children, fetuses, the elderly and those with existing health compromises are even more vulnerable than the general population.

## 6. The Science: Flora and Fauna

There is another large body of science documenting the <u>environmental impact</u> of blanketing our world in radiation signals that are 1,000,000,000,000,000,000 times greater than the earth's natural electromagnetic field. <u>Pollinators are disappearing, birds' navigation systems are disoriented</u>, and every ecosystem is impacted.

As if it weren't bad enough what we are doing with electropollution here on the ground, the industry is now launching thousands of 5G satellites into the sky to blanket every corner of the earth with wireless radiation beams connecting to devices on the land. Soon there will be no place left to go without being radiated unless we take bold action.

#### 7. Climate Impact

The engineering community reports <u>wireless systems consume 10x more energy</u> than the safer, responsible technology solutions of fiber to and through the premises. As far back as 2012 a Greenpeace analyst reported if the telecom industry were a country, it would be the <u>fifth</u> <u>largest consumer of energy in the world</u>. If 5G and the Internet of Things are allowed to proliferate, energy consumption is expected to multiply exponentially.

# 8. Data Security and Privacy

When our data is sent through the air using microwaves, it is easily hacked. When signal is run through secure cables, it is not. As you are likely aware, this goes beyond personal data as intruders can shut down our whole grid by hacking into wireless systems more easily.

Another privacy issue is that utility "smart" meters can <u>harvest private data</u> from ratepayers' usage patterns which can then be sold to third party vendors interested in selling the ratepayer products, or used by criminals to detect when you are not home and plan their break-ins accordingly. Massachusetts should not be investing in more wireless infrastructure for grid modernization. We should work with the utility companies to install meters that are hardwired to the premises and forego any wireless transmitters. Rep. Tommy Golden's <u>H. 3309</u> could be amended accordingly.

## 9. 5G Good for Telecom, Bad for the Public and Environment

Wireless technology is highly profitable and has a short life, thereby creating a repeated revenue stream for industry as upgrades and replacement cycles are imposed. The <u>e-waste</u> is terrible for our planet, from the human atrocities inflicted to mine the many minerals needed in each wireless product, to the mounds of unrecyclable materials in the landfills.

With 5G, the industry intends to put a cell tower called a small cell at bedroom, right inside our neighborhoods at the curb in the public accessway on poles or wires.

<u>PC Magazine</u> and others report there is **no need for 5G**, it is not delivering the promised faster speeds than what already exists with 4G. Fiber to and through the premises will always deliver far superior speeds and reliability than anything wireless can ever deliver.

The wireless industry is also <u>buying up the entertainment industry</u> as they promote 5G for faster streaming services and content development. This is yet another new revenue stream.

Unless towns have updated their zoning bylaws, the industry is already putting these toxic small cells at close range in many towns. See the <u>map of Boston installations</u>.

As this <u>two-minute clip</u> from Boston25 News indicates, Verizon has installed small cells up Fenway Park too, where they are radiating thousands of spectators at close range. They've gotten into <u>Gillette Stadium</u> too.

#### 10. Major Breakthroughs in the Medical Community

Many children and adults are suffering from microwave sicknesses and being misdiagnosed because doctors and the public have been kept in the dark by the powerful wireless industry.

When we first introduced MA legislation, we had no way of training health care practitioners to recognize, diagnose, treat and prevent these environmentally-induced illnesses.

Martha's Vineyard environmental medicine practitioner Dr. Lisa Nagy co-chaired the first U.S. Electromagnetic Fields Conference in 2019. In 2021 another expanded international <a href="EMF">EMF</a> <a href="Medical Conference">Medical Conference</a> was held with world leading doctors, scientists and public health experts. I was honored to present state and local policy at both conferences.

Doctors, nurses, first responders and other health care providers can now earn 24.5 continuing medical education credits through affordable self-paced on-line training (note, the CME/CE opportunity expires in May, so if your medical team isn't trained, you might want to strongly encourage them to register for the conference by May 1. Remember, the damage from this radiation is cumulative in our tissues; those feeling fine today may hit a tipping point tomorrow and if their doctors aren't trained, they will be misdiagnosed and continue to suffer). The public is also welcome to enroll at a reduced rate to learn directly from the experts.

It was very unsettling to hear from several of the doctors that their patient load increases when utility "smart" meters go in, and when cell towers and small cells are installed at close range. They further indicated that with the increasing electropollution damaging the gray and white matter of the brain, we can anticipate increases in societal crimes including mass shootings.

Dr. Lisa Nagy and I worked with the Massachusetts Medical Society for two years, and in December 2021 they converted our **Resolution**: <u>Wireless Communications Public Safety Standards Reevaluation</u> to a <u>policy statement</u>:

That the Massachusetts Medical Society supports continuing research, including quality epidemiologic studies, by appropriate agencies and entities to produce evidence-based data on the effect(s) of radio frequency radiation on human health. If indicated, study findings should be used to revise and update public health standards for safe limits of human exposure to radio frequency radiation.

See also the <u>1997 Boston Physicians' and Scientists' Petition to Avert Public Exposures to Microwaves</u>.

## **Growing Urgency for All**

If we do not stop the industry, they will continue to install close-range cell towers next to our homes, and now directly on our schools too.

Please see this website of the captured Federal Department of Education: <u>School District</u> <u>Wireless Network Models</u>. You will see they are now <u>targeting school buildings and buses for toxic cell tower/antenna installations</u>, as well as mounting them directly on home rooftops, at the curb at bedroom height, and on water towers inside neighborhoods.

The industry targeted our children through their 21st Century Classroom campaign with the goal of having a one-to-one device in the hands of every child. They know once you have a child as a consumer, you often get to keep them for life.

The Pittsfield adults and children have had to flee this type of cell tower infrastructure to survive. If the industry succeeds in rolling out the plans on the DOE website, where will anybody go?

The radiation will be unlivable everywhere, plus the children will continue to be radiated every hour of every school day, even on the playgrounds and fields. Again, wireless radiation is a neurotoxin and we are already at epidemic levels of anxiety and depression with the amount of radiation currently in most schools and homes today.

Even pre-pandemic our schools were unable to resolve the escalation of mental health issues, and now we've given every student in the Commonwealth a toxic wireless tablet to access their education -- with no safety instructions to hard-wire with an inexpensive adapter to an Ethernet cable, and turn off the multiple radiation antennas.

Please see this <u>private three-minute video</u> demonstrating the toxic radiation exposure levels from a student's school-issued Chromebook, and how to very easily hard-wire and turn off the radiation. The radiation was at 25,000 microwatts per square meter and the science indicates we should be at 10 or less indoors, and at 0.1 in our sleeping areas.

A Boston resident and I measured the radiation in the North End, on Hanover Street where small cells have been installed. We got readings as high as 600,000. The science indicates we should be at 1,000 or less outdoors, and that is assuming we have a clean home environment where our bodies can do proper cell repair and regeneration while we sleep. With a cell tower outside or utility "smart" meters mounted in or on our homes, there is no escape.

As a recent paper identified, this radiation is causing <u>Alzheimer's</u> to develop at earlier and earlier ages now too. What will become of our workforce if we continue to do nothing in Massachusetts?

## The Solution

Transitioning to responsible technology is not rocket science:

• **Education** is key to shift the social norm from industry's push for all-wi-fi-all-the-time to responsible, superior hard-wired connections.

We should aim for As Low As Reasonably Achievable levels of wireless radiation for the devices under our control as well as for community infrastructure including utility "smart" meters, cell towers, small cell antennas and satellites. This <u>ALARA principle</u> is already used by the CDC for ionizing radiation. It's time to instate this as a guiding principle for wireless non-ionizing radiation too.

Dr. Bob Knorr at the MA DPH and I co-wrote <u>EMF fact sheets</u> which I was told would be released in 2016 and they never were. My non-profit Wireless Education has since

created easy half-hour on-line training courses for Schools & Families, as well as for the Corporate workplace. Environmental Health Trust has developed a treasure trove of resources as well. We are poised to quickly train the entire Commonwealth as soon as political will allows. I and others have presented to the DESE board, and former Interim Deputy Commissioner Wulfson told me they are waiting for higher authorities to tell them what to do. We need your leadership, Senator Rodrigues.

- Bring fiber-optics or high-speed cable to the premises (which most already have), and simply connect to the internet indoors via Ethernet cables and adapters to devices. Then turn off the radiating antennas in each device. The signal is much faster and more reliable through cables, privacy is better protected, and hard-wiring consumes far less energy than wireless systems. See Reinventing Wires: The Future of Landlines and Networks for guidance to steer public policy and community development.
- Funding may be possible through the ARPA broadband funds. We also already paid the
  industry to bring fiber to the premises years ago which they failed to fully deliver. They
  instead took much of that funding and used it to build out their inferior, highly
  profitable wireless networks. The Irregulators have sued, and paved the way for
  Massachusetts to recoup that funding. <u>Click here</u> for further information.

It's time to do what is best for our towns, not what the insatiable wireless industry would deceptively lead us to do. The retired President of Microsoft Canada, Frank Clegg, <u>presented to the MA State House in 2015</u>, and in his <u>recent NH testimony</u> he indicated <u>wireless technology is past its prime. The future lies in hard-wired technology to and through the premises for primary connectivity as other countries are already beginning to do, and it is up to governments to move industry there.</u>

We understand the industry has already set aside billions for their injustices just as big tobacco did. They are expecting to be held accountable as damage to the populace and environment are simply the cost of doing business for them.

Please exercise your lawful duty ASAP to hold them accountable so we can all live safely in our homes and communities. Begin by ensuring <a href="Resolve S. 186">Resolve S. 186</a> passes this session and in the interim take meaningful action to inform and protect the public while public policy catches up to the science.

Please do not hesitate to reach out if Massachusetts for Safe Technology can support your efforts further.

Kind regards,

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