

Dear Representative Farry and Committee Members:

Every state and local official is obligated, inter alia, under the US Telecommunications Act of 1996 (TCA), to regulate wireless communications facilities on the basis of the health effects of the radiation therefrom. No state or local official may lawfully fail to regulate the placement, construction, modification, and operations of wireless communications facilities on the basis of the health effects of the RF radiation.

The telecom industry has invested a great deal of money toward misinforming officials on this point. However, the TCA Preemption Clause, Section 704 subpart iv, does not preempt health effects. Indeed, the terms "health effects" and "health" are never mentioned, positively leaving these "fields" as they are called in preemption law, in the governing, regulatory hands of state and local officials. Only three activities are preempted: placement, construction, and modification. Operations of the equipment are not in any way preempted: indeed, the industry's attempt to have them preempted was stopped in Committee, when that term "operations" was removed from the draft law in 1996. The three preempted activities, all pertaining to equipment, are preempted from state and local regulation solely on the basis of "the environmental effects" of the RF radiation, such effects thus acknowledged therein to occur to living organisms. The operations of wireless communications facilities remain under state and local regulatory control on all bases, both health and environmental effects, which is why the National Environmental Protection Act (NEPA) retains its authority in tandem with the TCA.

As with this federal TCA Legislation, Judiciary precedents have also been misrepresented. The San Diego precedent, for example, does not, as widely rumored, interpret "environmental effects" to mean "health effects", but rather extends the preemption only to "health concerns". While "concerns" per that precedent are codified as "irrational", actual health effects are not mentioned as preempted. The judiciary in any case lacks authority to stand federal legislation on its head, to determine it to be precisely the contrary of the language Legislators enacted.

Since everyone on this Committee is thus obligated to regulate 5G and all other wireless communications facilities and their radiation and its deployment on the basis of the health effects of the radiation therefrom, and the environmental effects of their operations, I attest and affirm that I object to the placement, construction, modification, and operations of any and all wireless equipment for 5G, particularly those misleadingly called "small cells", on the basis of their various, severe harms to the public, environment health, agriculture, the economy, and transportation safety.

Since the late 1920s, an extremely large volume of study of radiofrequency / microwave (RF/MW) radiation bioeffects has been performed internationally and here in the United States, with more studies accumulated than exist, for example, for lead, cigarette smoking, or particular pesticides. This area of study has been very attractive to the world's militaries, since RF/MW radiation is invisible, inaudible and for the most part impalpable, while leaving no trace - thus a perfect weapon. Indeed, according to former

MI6 agent, physicist Barrie Trower PhD, microwave radiation with the same wavelengths, intensities, and modulation characteristics as 4G wifi have been used for confession extraction (meaning torture) as far back as the 1950s in the West - quite possibly earlier in the Eastern Bloc. By October 18, 1968, when the US Congress amended the Public Health Service Act to "protect the public against the effects of electronic products", the effects of RF/MW radiation were already considered *scientifically established*.

Among many examples, the insurer Lloyd's of London has notified wireless phone companies that it will not pay health-related claims, knowing how harmful the 4G-5G Distributed Antenna System (DAS) is, and anticipating how great the health and financial losses therefrom will be. Insurance analyst A. M. Best Company states on the basis of its analysis:

"Dangers to the estimated 250,000 workers per year who come in close contact with cell phone antennas, however, are now more clearly established. Thermal effects of the cellular antennas, which act at close range essentially as open microwave ovens, can include eye damage, sterility and cognitive impairments. While workers of cellular companies are well trained on the potential dangers, other workers exposed to the antennas are often unaware of the health risks. The continued exponential growth of cellular towers will significantly increase exposure to these workers and others coming into close contact with high-energy cell phone antenna radiation."

While the US Federal Communications Commission (FCC) has implied publicly through its former Chair Tom Wheeler that it has not performed health effects studies, one must note that this Agency in any case lacks both authority and expertise by which to perform or direct any such study. Comparable to the Atomic Energy Commission, but overseeing radiation on the RF/MW radiation side of the electromagnetic spectrum, the FCC holds an industry-promotional role that cannot produce independent study. There exists no federal agency comparable to the Nuclear Regulatory Commission on the RF/MW radiation side of the spectrum. US Senator Richard Blumenthal (D-CT) has clarified FCC's lack of regulatory activity by asking the FCC for safety studies, of which he has received none.

Having been a nurse for over 40 years, I additionally attest and affirm that, given the maximized absorption of 5G irradiation in human bodies, and given 5G wavelengths and proximities, the health decline in the generally public, particularly children will be precipitous, and, should 5G proliferate, the next generation will be plagued with unprecedented birth defects, infertility, DNA damage, neurological impairments, cardiac problems, immune and other diseases and early deaths. One cannot imagine a worse attack on America or our Commonwealth.

In conclusion, the best interests of Pennsylvanians are not being considered. Even the telecom corporations themselves bemoan their anticipated huge losses from the massive equipment investments necessary for 5G buildout, while as they refuse to fulfill their

extant contract with all US residents for Fiber-to-the-Premises (FTTP) - the infrastructure already paid for by coercion by every US phone user of any type since the early 1990s. Wired communication is faster, more reliable and more secure; and FTTP must by law be provided to every home and business rather than 5G, the latter not merely prone to failure, but *bound* to it.

CBS news reported 77 cell towers knocked out by the Sonoma, CA fires. Damage to and from these close-promity antennas is inevitable. Wireless systems are easily hacked and, as a former CIA Director James Woolsey has stated publicly, are a real national security problem.

A cell tower was recently removed from the vicinity of an elementary school in [Ripon, CA](#), after four children there were diagnosed with brain tumors. Firefighter groups in the US have long opposed cell towers on their stations. In California they have successfully exempted themselves from the forced placement of antennas on their stations because of the actual health effects many have suffered from the RF/MW radiation. This exemption is codified in **California's 2015 legislation AB57**

Pennsylvanians do not have a union lobby to protect them from wireless radiation, but our elected officials are obligated to protect us nevertheless from the health effects of wireless irradiation - and to protect our environment from wireless operations.

Kindly note the recent UNANIMOUS vote of Louisiana legislators to protect against wireless radiation:

[Requests the Department of Environmental Quality in conjunction with the Louisiana Department of Health to study the effects of evolving 5G technology.](#) Louisiana has joined the increasing list of countries, states and cities that have called a moratorium on further antenna deployment: Switzerland, Austria, Brussels, Geneva, Vatican City, Tampa and West Palm Beach, FL, and others.

Pennsylvania Legislators must immediately: 1) Declare a moratorium on any further installation of wireless antennas; 2) Vote to require FTTP for all Pennsylvanians; 3) Cease hazardous Geoengineering activities over, upon, and within our State by means of Geoengineering legislation, noting that 5G antennas are intended for hazardous weather modification activities, which our astute State had legislatively decried as far back as the 1960s.

I will look forward to receiving your response confirming your intent to comply and protect health and environment, and for these purposes, to halt 5G.

Respectfully submitted June 12, 2019,
Public hearing on Wireless Small Cell Siting Legislation.

Beverly DeCer RN
Philadelphia PA

Public Law 90-602, October 18, 1968

AN ACT to amend the Public Health Service Act to provide for the protection of the public health from radiation emissions from electronic products.

“Subpart 3 -- Electronic Product Radiation Control

“DECLARATION OF PURPOSE

“Sec. 354. The Congress hereby declares that the public health and safety must be protected from the dangers of electronic product radiation.”

Congress of the United States

Washington, DC 20510

December 3, 2018

The Honorable Brendan Carr
Commissioner
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Commissioner Carr:

We write with interest regarding your recent remarks on the safety of 5G technologies during a Senate Commerce Committee field hearing in Sioux Falls, South Dakota.

During this hearing, the Mayor of Sioux Falls, the Honorable Paul TenHaken, asked about “the health ramifications of 5G and small cell deployment.” His request, as the leader of his municipality, was for “clear direction, talking points, studies that have been done that show that there is no harm to our constituents and to the taxpayers on putting these small cells on towers close to libraries, close to schools, close to their homes.”

Speaking on behalf of the Federal Communications Commission (FCC), you explained, “Federal law actually says that state and local governments can’t take [radiofrequency] concerns into account given how much work has gone into this issue at the federal level...Both at the FCC and other expert health agencies in Washington, they stay very much up to speed on these issues and have reached the determination that these are safe.”

Most of our current regulations regarding radiofrequency safety were adopted in 1996 and have not yet been updated for next generation equipment and devices. For example, the FCC’s specific absorption rate (SAR) limits do not apply to devices operating above 6.0 GHz; however, 5G devices will operate at frequencies as high as or even exceeding 24 GHz. The FCC has acknowledged, “The SAR probe calibration, measurement accuracy, tissue dielectric parameters and other SAR measurement procedures required for testing recent generation wireless devices need further examination.”¹

Furthermore, the final results of the world’s largest and most expensive study to date on the link between radiofrequency radiation and cancer were only just released on November 1, 2018 by the National Toxicology Program (NTP)—an inter-agency program within the U.S.

¹ Federal Communications Commission, Office of Engineering and Technology, Laboratory Division, “SAR Measurement Requirements for 100 MHz TO 6 GHz.”
https://apps.fcc.gov/kdb/GetAttachment.html?id=RUMcMDL7fmDLsdRSsbCNoA%3D%3D&desc=865664%20D01%20SAR%20Measurement%20100%20MHz%20to%206%20GHz%20v01r04&tracking_number=28242.

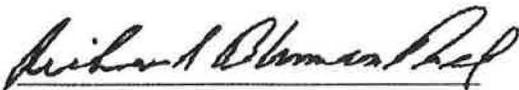
Department of Health and Human Services.² That study, which began in 1999, is limited in scope to radiofrequency radiation associated with 2G and 3G cell phones. As you know, this study found evidence of cancerous heart tumors, as well as some evidence of cancerous brain tumors, in male rats exposed to exposed to high levels of radiofrequency radiation like that used in 2G and 3G cell phones. However, researchers have cautioned that findings “do not apply to 4G or 5G technologies.”³

To ensure we communicate accurate information to our constituents—many of whom have concerns similar to Mayor TenHaken’s—we respectfully request you provide to our offices the 5G safety determination from FCC and relevant health agencies that you referred to during the field hearing. Please also include current citations for the studies informing that safety determination. Like Mayor TenHaken, we recognize that the literature on 5G technology may be limited “because it’s so new,” and are interested in acquainting ourselves with the latest studies evaluating the health effects of high-band frequencies and modulations that would be used in 5G networks.

The cooperation and partnership of localities and states will be critical as we move forward with this transformative technology, which promises wireless speeds as much as five times faster and with much lower latency. Carriers will also need updated guidelines governing the authorization of devices to be used with 5G. We also believe it is critical for the FCC to act on its March 27, 2013 Further Notice of Proposed Rulemaking and Inquiry to ensure all individuals, and especially those working in close proximity to the hundreds of thousands of small cell facilities to be deployed, are protected from any kind of excess radiofrequency radiation.⁴

We look forward to hearing from you on this important matter. We respectfully request a response by December 17, 2018.

Sincerely,



Richard Blumenthal
United States Senator



Anna G. Eshoo
Member of Congress

² William J. Broad, “Study of Cellphone Risks Finds ‘Some Evidence’ of Link to Cancer, at Least in Male Rats,” New York Times (New York, New York), November 1, 2018, <https://www.nytimes.com/2018/11/01/health/cellphone-radiation-cancer.html>.

³ National Toxicology Program, “Cell Phone Radio Frequency Radiation Studies,” https://www.niehs.nih.gov/health/materials/cell_phone_radiofrequency_radiation_studies_508.pdf.

⁴ Federal Communications Commission, “Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies; Proposed Changes in the Commission’s Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields,” 28 FCC Rcd 3498 (4), <https://docs.fcc.gov/public/attachments/FCC-13-39A1.pdf>.

February 11, 2013

It is critical for insurers to maintain vigilant oversight of these new risks.

Emerging Technologies Pose Significant Risks with Possible Long-Tail Losses

The insurance industry faces a constantly escalating level of exposure from rapidly developing technologies with risks that are not well understood. In many situations, the science associated with understanding these new risks is in the early stages of development.

A.M. Best believes that it is critical for insurers to maintain vigilant oversight of emerging technologies as a critical component of their enterprise risk management system. Effective enterprise risk management encompasses identifying, evaluating and addressing risks that could threaten the earnings or viability of an insurer. This includes a prospective look at the underwriting exposures so that changes to policy language or underwriting criteria can properly manage losses from these new risks. An exposure which may present only insignificant insured losses at present, may bring future unprecedented losses.

None of the current emerging technologies appears to be the next asbestos, the longest running and most expensive tort in U.S. history, according to the Rand Institute. Asbestos in many ways presented the "perfect storm" of loss characteristics: extreme toxicity; a very lengthy latency period before emergence of illness; a contagion capability through airborne transmission and physical contact; and lengthy exposure to a very large number of workers, their family members and asbestos product users.

A.M. Best recently estimated the U.S. property/casualty industry's ultimate asbestos losses at \$85 billion. While losses from emerging technologies may pale in comparison, they still could be extremely significant to the industry. Insurers need to monitor the manner in which emerging technologies are, or are likely to be, deployed; the risks associated with their use; their residual or unintended impacts; and the manner in which the insurance policies may be called upon to cover losses.

Emerging Technology-Based Risks

RF (Radio Frequency) Radiation Risk – Today there are more than 600,000 cell sites in the United States and that number is expected to grow with the demand for faster, more reliable wireless devices. The risks associated with long term use of cell phones, although much studied over the past 10 years, remains unclear. Dangers to the estimated 250,000 workers per year who come in close contact with cell phone antennas, however, are now more clearly established. Thermal effects of the cellular antennas, which act at close range essentially as open microwave ovens can include eye damage, sterility and cognitive impairments. While workers of cellular companies are well trained on the potential dangers, other workers exposed to the antennas are often unaware of the health risks. The continued exponential growth of cellular towers will significantly increase exposure to these workers and others coming into close contact with high-energy cell phone antenna radiation.

Cyber Risk – Significant data breaches have become common (e.g., Citigroup, the International Monetary Fund, JP Morgan Chase & Co., Sony Online Entertainment, Hilton Worldwide, Marriott International Inc., Verizon and Heartland Payment Systems).

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Editorial Management

Carole Ann King



2019 Regular Session

HOUSE RESOLUTION NO. 145

BY REPRESENTATIVE ABRAMSON

A RESOLUTION

To urge and request the Department of Environmental Quality in conjunction with the Louisiana Department of Health to study the environmental and health effects of evolving fifth generation cellular network technology (5G) and report its findings to the House Committee on Natural Resources and Environment and the House Committee on Health and Welfare no later than sixty days prior to the convening of the 2020 Regular Session of the Legislature.

WHEREAS, 5G technology is intended to greatly increase device capability and connectivity but also may pose risks to the environment due to increased radio-frequency radiation exposure; and

WHEREAS, a study is necessary to examine the advantages and risks associated with 5G technology, with a focus on the environmental impact and potential related effects; and

WHEREAS, peer-reviewed studies on this topic show the potential for wide-range effects; and

WHEREAS, 5G technology requires small cellular towers to be placed a short distance apart, closer than existing towers, at telephone pole height, and will operate in conjunction with the 3G and 4G technology infrastructure; and

WHEREAS, the insurance industry may have placed exclusions in policies to exempt damage caused by this technology; and

WHEREAS, certain manufacturers provide warnings to consumers regarding the reception of devices using this technology; and

WHEREAS, input is needed from the technological and other communities as well as persons involved with developing 5G technology.

THEREFORE, BE IT RESOLVED that the House of Representatives of the Legislature of Louisiana does hereby urge and request the Department of Environmental Quality in conjunction with the Louisiana Department of Health to study the environmental and health effects of evolving 5G technology and report its findings to the House Committee on Natural Resources and Environment and the House Committee on Health and Welfare no later than sixty days prior to the convening of the 2020 Regular Session of the Legislature.

BE IT FURTHER RESOLVED that a copy of this Resolution be transmitted to the secretary of the Department of Environmental Quality and the secretary of the Louisiana Department of Health.

SPEAKER OF THE HOUSE OF REPRESENTATIVES

