



OFFICE OF
THE CHAIRMAN

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

November 24, 2015

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Federal Communications Commission
Office of the Secretary

ET Doe. 03-137

The Honorable Anna G. Eshoo
U.S. House of Representatives
241 Cannon House Office Building
Washington, D.C. 20515

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Dear Congresswoman Eshoo:

Thank you for inquiring about the Commission's work to ensure RF emission safety protocols for America's workers. I am pleased that the Commission's Office of Engineering and Technology (OET) Chief recently briefed your staff on this matter. I understand that they discussed some of the issues concerning our work with other agencies, general enforcement efforts, and the FCC's ongoing rulemaking related to RF radiation exposure. This is a very important issue for the Commission and we have been focused on ensuring the safety of those who work in proximity to RF emitters.

On March 29, 2013, the Commission adopted a *Report and Order, Further Notice of Proposed Rulemaking and Notice of Inquiry*, based in part on the developing understanding of RF radiation issues since our prior inquiries. Since then, we have received nearly a thousand comments totaling more than 20,000 pages.

The current proceeding is complex and involves several other agencies with expertise in health, human RF radiation exposure, and safety issues. As you are aware, the Commission is not the expert subject matter agency for health and safety and, accordingly, we rely on our partner agencies to provide guidance on such matters. On February 4, 2015, the OET Chief sent letters to respective counterparts at regulatory health and safety agencies, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), and the Occupational Safety and Health Administration (OSHA), encouraging their contribution of comments to our record in response to the substantive issues we raised. These letters were in addition to the Commission's regular and ongoing staff-level communications with our partner agencies on RF issues.

Please be assured that I take the ongoing process very seriously and I have directed my staff to prioritize this proceeding. Last year, I was joined by Secretary of Labor, Thomas Perez, in conducting a workshop at the Commission to explore issues surrounding tower climber safety. In conjunction with OSHA, the Commission's workshop focused on injury prevention and fatalities involving work on communications towers. This working relationship with OSHA is ongoing and has led to successful, collaborative efforts to increase awareness and education and reduce on-the-job injuries for tower workers.

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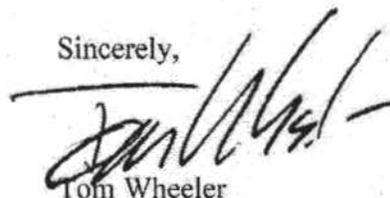
As you correctly identify in your letter, workers who are not routinely servicing the towers themselves, such as rooftop maintenance staff, electricians and painters, however, create a different set of job site concerns. Many of the safety issues in those cases are related to signage and devices to provide exposure warnings of towers that might otherwise be unseen or nearby. While the Commission is actively considering how its rules can better protect these other classes of workers, the Commission's Enforcement Bureau is instrumental in ensuring compliance with its existing safety rules.

As you note, in 2014 the Commission entered a consent decree with Verizon related to alleged violations of its safety rules, leading to a \$50,000 forfeiture and the carrier's agreement to implement a compliance plan to provide training and take other safety measures in order to protect its employees, contractors and others who may come into contact with RF emissions from its wireless facilities. I understand that Verizon Wireless has spent at least \$4.2 million to inspect all of its 5,000 rooftop antenna sites and to review and update RF exposure warning signage at access and antenna points. Also, employees at the company's two network operations centers have been trained on how to inform individuals working near transmitter sites on safety measures.

This is just one example of investigations that the Commission is conducting to enforce tower/RF safety rules. After the OET Chief briefed your staff, the Commission released two Notices of Apparent Liability proposing forfeitures of \$60,000 and \$25,000 against T-Mobile and WirelessCo, respectively, for failing to adequately prevent public access to areas near rooftop stations that exceeded general population radiofrequency emission limits. We are committed to continue the diligent enforcement of our rules so as to ensure worker safety.

Given your significant concerns about the current ongoing proceeding, I have directed our staff to add your letter to the docket to ensure that your views are considered as we move toward a formal resolution. Thank you again for your interest and the opportunity to brief your staff.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Wheeler", is written over a horizontal line. The signature is stylized and cursive.

Tom Wheeler



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

November 24, 2015

The Honorable Richard Blumenthal
United States Senate
702 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Blumenthal:

Thank you for inquiring about the Commission's work to ensure RF emission safety protocols for America's workers. I am pleased that the Commission's Office of Engineering and Technology (OET) Chief recently briefed your staff on this matter. I understand that they discussed some of the issues concerning our work with other agencies, general enforcement efforts, and the FCC's ongoing rulemaking related to RF radiation exposure. This is a very important issue for the Commission and we have been focused on ensuring the safety of those who work in proximity to RF emitters.

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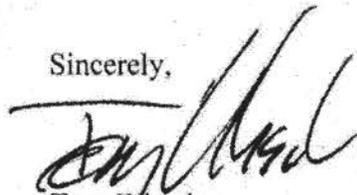
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Sincerely,



Tom Wheeler

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Congress of the United States
Washington, DC 20510

Spectrum
RF
Radiation

September 17, 2015

The Honorable Tom Wheeler, Chairman
Federal Communications Commission
445 12th St., Southwest
Washington, D.C. 20554

Dear Chairman Wheeler,

We write with concern for the health and safety of the estimated 250,000 people who work each year in close proximity to cellular antennas and may be exposed to radiofrequency (RF) radiation in excess of the Federal Communications Commission's (FCC's) human exposure limits. Excessive exposure to RF radiation leads to well-documented potential harms, especially to workers who spend time near the antenna and in the line of the antenna's beam. At sufficient power levels and exposure durations, RF radiation has the ability to heat biological tissue. Thermal effects can include eye damage, sterility, and cognitive impairments.¹

Even though the FCC recommends that wireless carriers control exposure to harmful RF radiation using safety protocols such as signs, barricades, and training, it has come to our attention that these recommendations have not consistently been implemented to protect workers.

We urge the FCC and the Occupational Safety and Health Administration (OSHA) to work together to enforce exposure limits and ensure wireless carriers are taking the required precautions to protect the safety of all persons who may be exposed to dangerous levels of RF radiation near wireless towers.

To close gaps in their networks and to satisfy the voracious consumer demand for their services, wireless carriers depend on leasing rooftop space and building access from property managers. As a result, cellular antennas are now found atop all kinds of buildings, including apartment buildings, schools, hospitals, places of worship, fire stations, communication towers, and other public and private buildings. Even our nation's cellular towers, which are generally free-standing structures with restricted external access, also pose both RF radiation and climber safety occupational hazards that need to be addressed to protect the workforce.

Rooftop and building mounted antenna sites also endanger not only the wireless industry's trained RF technicians but also roofers, water proofers, electricians, carpenters, building maintenance

¹ <http://www.ambest.com/directories/bestconnect/EmergingRisks.pdf>

personnel, HVAC technicians, painters, firefighters, and other workers who may come in close proximity and be placed at risk of RF injuries.

While wireless carriers take important precautions, such as outfitting their employees with protective equipment, providing RF exposure monitoring units, and even powering down antennas to eliminate the RF radiation hazard, their subcontractors and unaffiliated third-party workers are not regularly afforded these same protections. These subcontractors and third parties often receive no RF safety training and are left on their own to determine the existence, location, and degree of the RF radiation hazards.

Further complicating the situation, RF radiation cannot be felt, and many cellular antennas these days are constructed in a camouflage style and made to look like part of the buildings they are attached to. Known as "stealth antennas," they can be undetectable to the untrained eye. This practice further hinders efforts by even the most earnest workers to properly protect themselves. It is crucial that workers are able to take steps to safeguard themselves from the RF radiation.

A report last October from the *Wall Street Journal* revealed that one in ten antenna sites does not adhere to FCC guidelines for providing the appropriate level of awareness and control to workers who may be exposed to RF radiation above the limits for the general population.² In addition, last year, Verizon Wireless and the FCC's Enforcement Bureau entered into a consent decree for Verizon's alleged violations of RF exposure limits at rooftop antenna sites in Hartford, Connecticut and Philadelphia, Pennsylvania. It is unacceptable that RF warning signs have been found missing, mislabeled, unintelligible, or out-of-date, and that strategies to control access (e.g. barricades, locks, and fences) are in disrepair.

In light of these problems, the FCC has a responsibility to ensure the existence of – and compliance with – a comprehensive worker-safety framework.

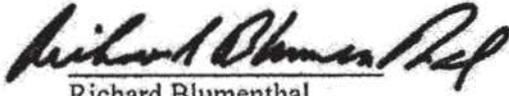
We are pleased that the FCC's March 27, 2013 *Report and Order* reminds FCC licensees of their obligation to address worker exposure issues, and clarifies that workers subject to the occupational limits must be fully aware of and able to exercise control over their RF exposure. We have also noted that the *Further NPRM* advances new specific requirements for ensuring licensees comply with exposure limits under the different RF exposure categories.

We urge the FCC to move swiftly to finalize the *Further NPRM*, and to consult with OSHA and others to ensure that the final rule is effective. We also expect that in the interim, the FCC, in collaboration with OSHA, will continue to proactively enforce all existing requirements, including tower-climber safety, and hold accountable all licensees that fail to implement the safeguards required to protect workers.

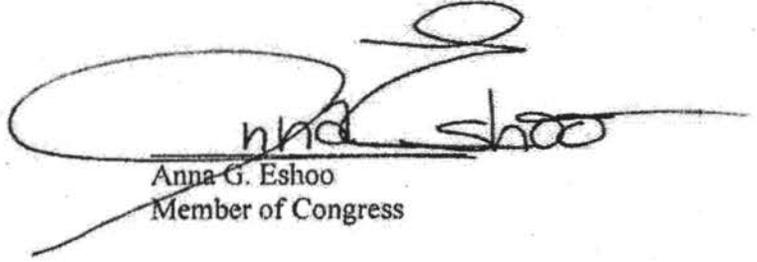
We look forward to hearing what next steps you have planned to make sure that the expansion of our telecommunications infrastructure does not come at the expense of the health and safety of hardworking Americans. Thank you for your attention to this very important occupational health and safety matter.

² <http://online.wsj.com/articles/cellphone-boom-spurs-antenna-safety-worries-1412293055>

Sincerely,



Richard Blumenthal
United States Senate



Anna G. Eshoo
Member of Congress

Cc: Thomas E. Perez, Secretary of Labor