



# **“Not in my front yard!”**

## **Neighborhood opposition to 5G escalating**

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### **Introduction**

Since COVID’s arrival, I have elevated my fitness routine to include running 3-4 times per week before the sun rises over the Tampa Bay. Like Florida’s summer afternoon showers, new small cell antennas attached to electric distribution poles and light poles seem to appear daily on my run. My neighbors walk to their mailboxes and look up to find canisters on poles holding 5G antennas near their front yards. With antennas being less than 30 feet above their heads, most of them openly express concern about exposure to radio waves and are angry about the visual pollution. The reality that all of these people have cellular phones and rely heavily on their home’s Wi-Fi service – as much for work-related reasons as personal ones – is of no consequence to them. They disregard the fact that wireless infrastructure is precisely what makes many things in their lives possible .... tele-commuting, tele-medicine, at-home education/e-learning, Netflix, Facetiming with Grandma, grocery shopping via internet, etc., “Not in my backyard!”, they exclaim. After all, everyone wants to go to heaven, but no one wants to die.

**Telecom industry  
must address RF  
safety concerns  
with greater  
transparency**



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## Neighborhood opposition to 5G escalating

Since the deployment of analog networks, the wireless industry has always been subject to public opposition toward the deployment of network infrastructure and thanks to the internet, that opposition is growing. In the 1990s, NIMBYs (Not in My Backyard activists) rallied against cell towers that were necessary to provide wireless coverage over large geographic areas. With the exception of falling tower fears, the arguments against towers then are the same as small cells today; radio frequency (RF) exposure as a possible health risk, aesthetics, proximity to residences and impact on home values.



Historically, the wireless telecom industry has responded using varying levels of “expert” testimony and complex engineering data, provided to varying degrees of success by the wireless operators themselves, site acquisition specialists, attorneys, tower companies, regulatory compliance experts, and RF engineers, among others. The lack of a clear, consistent industry message likely contributed to the growing suspicion and distrust among the general public and local officials. Land use approval delays and moratoriums by local governing bodies have led to the FCC providing federal guidance to local governments regarding their ability to regulate telecommunications infrastructure. The FCC dictated approval timelines (i.e., “shot clock”) and acceptable permitting fees, while eliminating local government’s ability to delay or deny applications due to aesthetics or health concerns as long as RF exposure levels met FCC guidelines.

The FCC’s guidelines only served to shackle the city council, planning commission, and mayor’s ability to address concerns of the residents they represent. While sympathetically listening to citizen concerns, local officials across the country are forced to respond with, “our hands are tied”, which only further frustrates the public. This has led to growing distrust regarding the safety of RF emissions from wireless sites, small cells in particular, and adds to the internet’s list of conspiracy theories.

The issue of human exposure to RF emissions has always been the most difficult concern for the industry to effectively address. Proving something is safe is a difficult task, especially when it (radio waves) is invisible, tasteless and has no smell. The internet is chock full of baseless theories surrounding 5G, including most notably that it contributes to cancer, helps spread COVID, facilitates foreign spying, and a host of other health-related issues. Anti-5G rallies now occur globally. Cell tower vandalism in Europe and the U.S., as well as the recent bombing in Nashville, TN are evidence of an escalation from peaceful protests to violence.

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### Next Steps

Local governments have responded by requiring either predictive or on-site RF exposure surveys to show evidence of compliance with the FCC's Maximum Permissible Exposure (MPE) limits. Public hearings are often held so the public can express their concerns, share "scientific" studies found on the internet, and question the engineers defending the MPE studies. In the end, the reports and the testimony do not satisfy public concerns, while elected officials are forced to approve the applications - further fueling anger and conspiracy theories.

Some ways the telecom industry can address the growing opposition to 5G:

1. Standardize RF exposure reporting: While the methodology for predicting maximum exposure limits is relatively standard worldwide, the reports provided by compliance firms vary greatly in format, content, quality, readability, and clarity. In fact, many jurisdictions, especially in California, have created and mandated their own report templates to address this variability.
2. Require both pre-construction and post-construction MPE surveys for all new sites: This provides a comparison of the RF exposure at a location prior to and following the installation of antennas.
3. Require annual MPE surveys or whenever equipment is changed on the site to ensure regulatory compliance; or even better ..... continuously monitor RF emissions and make the MPE data available to the public.
4. Create a professional association for regulatory compliance companies to establish industry standards for excellence and ensure only qualified companies represent the industry.

### Conclusion

While some members of the anti-5G movement will always believe RF is unsafe at any level regardless of regulatory compliance, establishing industry standards and making RF emissions data more readily available provides the transparency and goodwill the industry so desperately needs. In the absence of either, health concerns and conspiracy theories will continue to proliferate and fuel the anti-5G movement – thus negatively impacting the communities we live in by denying all of us the many benefits only wireless service(s) can provide.



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## About Waterford

Waterford Consultants was founded in 2004 and is a professional services organization specializing in regulatory compliance, engineering, site development, and a host of software-related offerings that service the wireless industry.

Waterford specializes in a diverse collection of technical and consulting services that continue to expand with significant focus given to utilizing the most innovative and tech-savvy solutions. Waterford's clientele consists of the industry's leading carriers, tower and structure owners, engineering and site acquisition firms, as well as most local, state and federal government organizations.

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