

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies	)	ET Docket No. 13-84
	)	
Proposed Changes in Commissions Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields	)	ET Docket No. 03-137
	)	

**COMMENTS OF THE CITY OF PORTLAND, OREGON ON THE  
REASSESSMENT OF FEDERAL COMMUNICATIONS COMMISSION  
RADIOFREQUENCY EXPOSURE LIMITS AND POLICIES**

**I. INTRODUCTION**

The City of Portland (“Portland”) submits these comments in response to the Notice of Proposed Rulemaking (“NPRM”), released March 29, 2013, in this proceeding.

Portland is Oregon’s most populous city, and the third most populous city in the Pacific Northwest region. Approximately 2,289,800 people live in the Portland metropolitan area (MSA)<sup>1</sup>, with about 600,000 within the City itself.<sup>2</sup> As a property owner with responsibility for managing usage of approximately 4,700 miles of public rights-of-way within the City, Portland<sup>3</sup> also has has numerous leases with wireless providers for building sites, water towers and facilities within the public streets. In public discussions regarding wireless facilities, there has been a great deal of citizen confusion

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<sup>1</sup> Suzanne Stevens, “Portland U.S.’s 23rd-largest metro area”, *Bizjournals.com* (June 24, 2011) [http://www.bizjournals.com/portland/blog/2011/06/portland-uss-23rd-largest-metro-area.html?ed=2011-06-24&s=article\\_du&ana=e\\_du\\_pub](http://www.bizjournals.com/portland/blog/2011/06/portland-uss-23rd-largest-metro-area.html?ed=2011-06-24&s=article_du&ana=e_du_pub).

<sup>2</sup> Portland State University, Population Research Center, *2010 Census Profiles—Oregon Cities Alphabetically M-P*, <http://www.pdx.edu/prc/sites/www.pdx.edu.prc/files/2010%20SF1%20Cities%20M-P.pdf>.

<sup>3</sup> <http://tinyurl.com/PBOTstreets>; <http://tinyurl.com/pdxstreets>.

over the existing Federal Communications Commission Radiofrequency Exposure standards.<sup>4</sup> Portland's most significant hope in the possible outcomes of the reassessment would be for the Commission, working with other federal agencies, to provide clarification and certainty on the federal exposure standards, as well as assurances to the general public on the safety of radiofrequency exposure.

Portland joins in and supports comments filed in this proceeding by the National Association of Telecommunications Officers and Advisors (NATOA).

The NPRM seeks comment on a number of very important issues concerning the standards for protection of humans from the potentially harmful effects of RF radiation.<sup>5</sup> Put simply, the NPRM asks whether the FCC should review its current RF exposure standards. Portland believes that the FCC should answer this question in the affirmative.

Portland does not claim to possess any particular technical expertise to evaluate the standards or comment on their scientific basis. However, Portland does have broad experience in siting wireless facilities throughout the City, both on private and public property through the land use process and in the public streets through rights-of-way agreements.<sup>6</sup> This experience provides Portland with a unique vantage point on the RF exposure issue.

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<sup>4</sup> Amanda Waldroupe, "Portland Turns Down Moratorium on Utility Poles", *The Lund Report* (November 17, 2010) [http://www.thelundreport.org/resource/portland\\_turns\\_down\\_moratorium\\_on\\_utility\\_poles](http://www.thelundreport.org/resource/portland_turns_down_moratorium_on_utility_poles)

<sup>5</sup> *In the Matter of Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies and Proposed Changes in Commissions Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields*, ET Docket No. 13-84 and ET Docket No. 03-137 (March 29, 2013).

<sup>6</sup> Zoning code administration and land use services are administered through Bureau of Development Services, while wireless sites within the right of way are administered by the Office for Community Technology. Portland has a map available through the City's website which shows wireless infrastructure within the city, which can be viewed at this link:

<http://www.portlandonline.com/bds/index.cfm?c=58517&a=393526>

Informational meetings with the public are often required as part of the wireless facility siting process within Portland, whether as part of land use review for siting on private property or for locating facilities within the public rights-of-way. Citizens are often very emotional at these meetings, expressing strong opposition to wireless facilities arising from perceived health risks from RF exposure. Even though local officials are pre-empted from considering health concerns relating to RF exposure from wireless facilities, citizens repeatedly identify health issues from RF exposure as a primary concern in siting wireless facilities.<sup>7</sup> The City of Portland's experience is not unique in this regard.<sup>8</sup>

In 2009 the City Council unanimously approved a resolution asking that the federal government update studies on potential health effects of radiofrequency wireless

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<sup>7</sup> See, for example: Anna Griffin, "Portland neighbors fight uphill battle against cell towers", *The Oregonian* (June 11, 2010), <http://preview.tinyurl.com/PDXneighborsfightcell>; Elizabeth Ussher Groff, "Cell phone tower dilemma in Eastmoreland," *The Sellwood Bee* (January, 2009); Reed Jackson, "Portland City Council's cellphone tower decision disappoints residents", *Daily Journal of Commerce* (April 30, 2012), <http://dcoregon.com/news/2012/04/30/residents-disappointed-over-portland-city-councils-cellphone-tower-vote/>; Steve Beaven, "T-Mobile officials meet boisterous crowd in Eastmoreland neighborhood to discuss antenna," *The Oregonian* (November 2, 2011), [http://www.oregonlive.com/portland/index.ssf/2011/11/t-mobile\\_officials\\_meet\\_boiste.html](http://www.oregonlive.com/portland/index.ssf/2011/11/t-mobile_officials_meet_boiste.html); Larry Bingham, "T-Mobile's Northeast Portland cell tower fight hits on concerns across city," *The Oregonian* (October 26, 2011), [http://www.oregonlive.com/portland/index.ssf/2011/10/t-mobile\\_draws\\_ire\\_from\\_northe.html](http://www.oregonlive.com/portland/index.ssf/2011/10/t-mobile_draws_ire_from_northe.html). "[Respect PDX] co-founder Anne Trudeau . . . pointed to peer-reviewed articles published in Ecologist Magazine showing that wireless antennas and radiation can cause health effects. "We really are very committed to presenting good evidence," Amanda Waldroupe, "Portland Neighborhoods Oppose Wireless Antennas", *The Lund Report* (September 15, 2010) [http://www.thelundreport.org/resource/portland\\_neighborhoods\\_oppose\\_wireless\\_antennas](http://www.thelundreport.org/resource/portland_neighborhoods_oppose_wireless_antennas) Omar Baddar, "Full Signal and the Effects of Wireless", *Huffington Post* (June 20, 2010) [http://www.huffingtonpost.com/omar-baddar/full-signal-the-effects-o\\_b\\_618771.html](http://www.huffingtonpost.com/omar-baddar/full-signal-the-effects-o_b_618771.html) Carrie Sturrock, "Cell phones and electromagnetic radiation a growing concern", *OregonLive* (March 05, 2010) [http://blog.oregonlive.com/pdxgreen/2010/03/cell\\_phones\\_and\\_electromagneti.html](http://blog.oregonlive.com/pdxgreen/2010/03/cell_phones_and_electromagneti.html) See also, Omar Baddar, "Full Signal and the Effects of Wireless", *Huffington Post* (June 20, 2010) [http://www.huffingtonpost.com/omar-baddar/full-signal-the-effects-o\\_b\\_618771.html](http://www.huffingtonpost.com/omar-baddar/full-signal-the-effects-o_b_618771.html)

<sup>8</sup> Corey Pein, "Wireless Waste: Portland schools have had to spend \$172,000 fighting a parent's lawsuit over Wi-Fi.", *Willamette Week* (June 20, 2012) [http://www.wweek.com/portland/article-19350-wireless\\_waste.html](http://www.wweek.com/portland/article-19350-wireless_waste.html)

exposure in light of significant increase in wireless use.<sup>9</sup> Copies of the Council resolution were sent to the appropriate federal agencies, as well as Oregon's Congressional delegation.

Recognizing the increasingly important role of wireless in the daily lives of citizens, the Portland City Council unanimously approved a local broadband strategic plan in 2011.<sup>10</sup> The City's broadband plan recognizes that fiber and wireless are both essential and complementary technologies. In 2013 City Council unanimously approved a resolution directing staff to participate in this proceeding and to request the FCC to update its guidelines for RF exposure.<sup>11</sup>

In Section IV.D "Mitigation," the FCC proposes that individuals "transiting" a potential radiation danger zone must not be exposed beyond "general population" limits which are lower than "occupational" maxima for trained workers.<sup>12</sup> Portland believes the extra protection for transients is warranted and supports the FCC's proposal. The warning signs and barriers should be considered minimal requirements. Local authorities should be allowed to require additional signage and access restrictions if appropriate.

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<sup>9</sup> Resolution No. 36706, Request the federal government to update studies on potential health effects of radio frequency wireless emissions in light of significant increases in wireless use, adopted by the Portland City Council on May 20, 2009, which is available here: <http://tinyurl.com/Resolution36706>  
*See also*, International Association of Fire Fighters, Division Of Occupational Health, Safety And Medicine, Position on the Health Effects from Radio Frequency/Microwave (RF/MW) Radiation in Fire Department Facilities from Base Stations for Antennas and Towers for the Conduction of Cell Phone Transmissions <http://www.iaff.org/hs/Facts/CellTowerFinal.asp> "[A]s adopted by its membership in August 2004,[the IAFF opposes] the use of fire stations as base stations for towers and/or antennas for the conduction of cell phone transmissions until a study with the highest scientific merit and integrity on health effects of exposure to low-intensity RF/MW radiation is conducted and it is proven that such sitings are not hazardous to the health of [IAFF] members." (citations omitted)

<sup>10</sup> Resolution No. 36879, Adopt Connecting to Our Future: Portland's Broadband Strategic Plan and direct the Office of Cable Communications and Franchise Management to develop a work plan for implementation (Resolution), adopted by the Portland City Council on September 14, 2011, which is available here: <http://tinyurl.com/Resolution36879>

<sup>11</sup> Resolution 37015, Authorize participation in Federal Communications Commission proceeding on radiofrequency exposure limits and policies (Resolution), adopted by the Portland City Council on April 24, 2013, which is available here: <http://tinyurl.com/Resolution37015>

<sup>12</sup> NPRM at ¶ 181.

At paragraph 210 of the Notice of Inquiry, the FCC seeks the assistance of other federal agencies with appropriate technical expertise in the areas of radiofrequency exposure standards, such as the Environmental Protection Agency, the Food and Drug Administration and the National Institute for Occupational Safety and Health.<sup>13</sup> The City supports this appeal and urges these other federal agencies to provide guidance, including undertaking to update prior health studies of RF exposure. It is appropriate for these other federal agencies “with jurisdiction by law or scientific expertise [to weigh in on] in this area as to the adequacy of [the Commission’s] current RF exposure limits, in terms of safety and effects on human health and environmental effects.”<sup>14</sup> Obtaining input from these other agencies may serve to put to rest the public’s discomfort with whether there is a scientific consensus on the safety of the Commission’s RF Exposure guidelines.

At paragraph 122, the FCC discusses variations among standard setting bodies in “averaging” radiation exposure over time.<sup>15</sup> The FCC should select the most protective of the standards and make them uniform so it is clear to the public and to local public safety and health authorities what are the controlling standards and how they apply.<sup>16</sup>

At paragraph 226 the FCC asks whether AM stations and other sources of radiation emissions, at levels so strong as to create a risk of burns, should be mapped.<sup>17</sup> As a local protector of public health and safety, the City should be able to decide whether mapping the locations would be an aid or a risk. This authority should reside locally.

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<sup>13</sup> NPRM, at ¶ 210.

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at ¶ 122.

<sup>16</sup> Reed Jackson, “Portland City Council’s cellphone tower decision disappoints residents”, *Daily Journal of Commerce* (April 30, 2012) <http://djcoregon.com/news/2012/04/30/residents-disappointed-over-portland-city-councils-cellphone-tower-vote/> (noting disagreement between cell tower applicant and neighborhood opponents regarding amount of effective radiated power (ERP) to be emitted by proposed facility)

<sup>17</sup> NPRM at ¶ 226.

At paragraph 234 comments are requested on "...whether the Commission should consistently require either disclosure of the maximum specific absorption rate (SAR) value or other more reliable exposure data in a standard format, perhaps in manuals, at point-of-sale, or on a website."<sup>18</sup> The FCC should adopt the proposal. This information should be widely disseminated and publicized through manuals, point-of-sale, and website postings.

## II. CONCLUSION

Portland understands the importance of wireless in today's world as evidenced by the proliferation of wireless devices in use throughout the City. In 2003 the FCC updated the guidelines for human exposure to RF exposure from wireless facilities based on reviews of prior scientific literature related to RF biological effects, primarily from the 1990s.<sup>19</sup> A survey released in May 2009 from the Centers for Disease Control and Prevention concluded that in 2008, for the first time, the number of households in the U.S. with only a cell phone exceeded the number of households in the U.S. with only a landline phone.<sup>20</sup> In 2012 the Government Accounting Office issued a report of its investigation into safety concerns related to mobile phones and concluded that further research into wireless technology is needed.<sup>21</sup> During City proceedings on siting wireless facilities, Portland citizens continue to voice concerns over perceived health risks associated with radiofrequency exposure. Given the continuing disquiet among substantial portions of the public, the Commission must act to assuage these generalized

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<sup>18</sup> *Id.* at ¶ 234.

<sup>19</sup> *In the Matter of Proposed Changes in the Commission's Rules Regarding Humane Exposure to Radiofrequency Electromagnetic Fields*, ET Docket No. 03-137 (June 12, 2005).

<sup>20</sup> Stephen J. Blumberg and Julian V. Luke, Division of Health Interview Statistics, National Center for Health Statistics, Centers for Disease Control and Prevention, *Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July – December 2008*, (May 6, 2009), at 5, Table 1.

<sup>21</sup> United States Government Accountability Office, *Telecommunications: Exposure and Testing Requirements for Mobile Phones Should Be Reassessed*, GAO-12-771 (Washington, D.C.: July 24, 2012).

concerns. Otherwise, this issue will continue to fester as an aspect of agitation and distrust at the local level.

For all of the reasons cited by the City of Portland, the Commission should undertake to reexamine, update and clarify its RF exposure standards working in concert with other responsible federal agencies.

Respectfully submitted this 28<sup>th</sup> day of August, 2013,

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