

Broadcast Signal Lab



Memorandum

On Wireless Facility Emissions Compliance

To Acton Planning Board
From David Maxson
Re Wireless Facility Emissions Compliance

Summary

The proposed wireless facility at Craig Road is inherently compliant with the FCC requirements for radio frequency emissions. The Planning Board may not further regulate the placement of the facility based on its emissions.

Discussion

Recent events prompt us to write this memorandum to clarify the record on wireless facility emissions. The applicant provided a copy of Massachusetts Department of Public Health (“DPH”) communications on facility compliance with state regulations. More recently, there was a submission of comments on wireless facility emissions. It is important to reiterate in writing the key elements of wireless facility emissions in zoning and land use proceedings.

The Telecommunications Act of 1996 (“TCA”), as the Planning Board is well aware, states *(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.* It is recognized that “environmental effects” include human exposure to the radio frequency emissions of wireless facilities.

In essence, the Planning Board of Acton has no authority to regulate the placement of a personal wireless facility or tower based on its emissions, as long as those emissions comply with FCC requirements. Broadcast Signal Lab has been providing analysis, measurements and advice with respect to communications facility compliance with FCC and State regulations since 1985.

With respect to the proposed tower at 5-7 Craig Road, the design of the facility is inherently compliant with 47 CFR §1.1307 Table 1. As such, the facility would be compliant with FCC limitations to human exposure to radio frequency energy.

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The Commonwealth of Massachusetts has regulations regarding human exposure to radio frequency energy, as well.¹ At the relevant wireless frequencies, the state regulations have the same human exposure limitations as the federal regulations do. As demonstrated by the applicant's submission of DPH communications, the state no longer registers and approves new communications facility installations.

Based on the foregoing, further discussion of placing wireless facilities based on their emissions would be counterproductive to the Planning Board's mission of assuring that the zoning bylaw is applied diligently to the proposed facility.

Endnote

It is important when reviewing any scientific interpretations to consider the entirety of the record. It is easy for parties strongly in favor and strongly opposed to wireless communications to "cherry-pick" the scientific literature to find a couple of studies that seem to prove their opposing points. It is the weight of all the evidence that matters.

The FCC provides sound information on radio frequency emissions exposure questions at <http://www.fcc.gov/oet/rfsafety/>.

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¹ My familiarity with state DPH regulations goes back to their inception in 1985. I have been consulting on compliance since then. I was appointed by DPH to an *ad hoc* committee of three to provide guidance to DPH in its 1997 revision of the state regulations (105 CMR §122). In 2009 DPH contracted Broadcast Signal Lab to provide follow-on analysis of emissions of a different sort (radar) on Cape Cod.