

Office of the City Manager

## REVISED AGENDA MATERIAL

**Meeting Date:** March 28, 2017

**Item Description:** Referral Response: Standards for Testing and Certification of DAS Antennas, Amending BMC Chapter 16.10

**From:** Dee Williams-Ridley, City Manager

**Submitted by:** Zach Cowan, City Attorney

This item has been revised to account for certain technical changes required in order to conform with state and federal regulations.



Office of the City Manager

ACTION CALENDAR

March 28, 2017

To: Honorable Mayor and Members of the City Council  
From: Dee Williams-Ridley, City Manager  
Submitted by: Zach Cowan, City Attorney  
Subject: Referral Response: Ordinance for Standards for Testing and Certification of DAS Antennas

RECOMMENDATION:

Adopt first reading of an ordinance that would add new subdivision 16.10.100.G requiring regular testing of wireless telecommunications facilities in the public right of way to verify compliance with FCC standards.

FISCAL IMPACTS OF RECOMMENDATION:

None; any costs will be reimbursed by applicants/providers.

CURRENT SITUATION AND ITS EFFECTS

This report responds to a referral that originally appeared on the agenda of the December 13, 2016 Council meeting and was sponsored by Councilmember Wengraf.

BACKGROUND:

On December 13, 2016, the Council directed the City Manager to return with “draft ordinance language to amend Section 16.10.100 of the Berkeley Municipal Code to include Standards for Testing and Certification of DAS Antennas and return to the City Council within 60 days.” (Attachment 1.)

The attached ordinance (Attachment 2) incorporates this language, with minor technical clarifications, and some modifications based on discussions with AT&T.

ENVIRONMENTAL SUSTAINABILITY

There are no identifiable environmental effects or opportunities associated with the subject of this report.

RATIONALE FOR RECOMMENDATION

This report responds to a Council referral.

ALTERNATIVE ACTIONS CONSIDERED

None.

CONTACT PERSON

Zach Cowan, City Attorney, 981-6950

Attachments:

- 1: December 13, 2016 Council item, "Ordinance for Standards for Testing and Certification of DAS Antennas"
- 2: Proposed ordinance "Amending Berkeley Municipal Code Section 16.10.100 to Require Regular testing of Wireless Telecommunications Facilities in the Public Right of Way in Order to Verify Compliance with FCC Requirements"

ORDINANCE NO. #,###-N.S

AMENDING BERKELEY MUNICIPAL CODE SECTION 16.10.100 TO REQUIRE REGULAR TESTING OF WIRELESS TELECOMMUNICATIONS FACILITIES IN THE PUBLIC RIGHT OF WAY IN ORDER TO VERIFY COMPLIANCE WITH FCC REQUIREMENTS

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That a new subdivision G is added to Berkeley Municipal Code Section 16.10.100 to read as follows:

G. No wireless telecommunications facility (“WTF”) or combination of facilities subject to this Chapter shall ~~at any time~~ produce power densities that exceed applicable ~~the FCC’s~~ limits for electric and magnetic field strength and power density for transmitters. In order to ensure ~~continuing~~ compliance with all applicable ~~emission exposure~~ standards, WTFs all wireless telecommunications facilities that are not categorically excluded from the FCC’s standards may be required to ~~shall~~ submit reports as required by this subdivision. Notwithstanding anything herein, no operator shall be required to provide any report, or any information in any report, that exceeds reports or information required by the FCC. The City may ~~obtain~~require, at the operator’s expense, independent verification of the results of any analysis. If an operator of a ~~WTF telecommunications facility~~ fails to supply the required reports or fails to correct a violation of the FCC standard following notification, the PROW Permit for that WTF shall be suspended until the operator complies with this subdivision.

1. Within forty five (45) days of initial operation or modification of a WTF that is not categorically excluded from the FCC’s standards, the operator of each new or modified telecommunications antenna associated with that WTF shall submit to the City a written report certification by a licensed professional engineer that the WTF’s radio frequency exposure is emissions are in compliance with applicable FCC regulations. The ~~report engineer~~ shall state measure the radio frequency radiation of the approved WTF, including the cumulative impact from other nearby WTFs, and state whether determine if it meets any applicable the FCC requirements. A report of these measurements and the engineer’s findings with respect to compliance with the FCC’s Maximum Permissible Exposure (MPE) limits shall be submitted to the City. If the report shows that the WTF does not comply with applicable FCC requirements, the owner or operator shall cease operation of the WTF until it complies with, or has been modified to comply with, FCC requirements this standard. Proof of compliance shall be a report certification provided by the ~~person engineer~~ who prepared the original report. The City may require, at the applicant’s expense, peer review or independent verification of the results of the analysis.

2. Prior to January 31<sup>st</sup> of every year, an authorized representative for the operator of a WTF permitted under this Chapter shall provide written certification to the City that each WTF is being operated in accordance with the applicable FCC Maximum Permissible Exposure (MPE) standards.

3. With respect to a WTF that is not categorically excluded from the FCC's standards, ~~Once~~ every two years, at the operator's expense, the City may conduct, or retain an ~~an approved licensed professional~~ engineer to conduct, an unannounced spot check of the WTF's compliance with applicable FCC MPE standards.

4. To the extent required by the FCC standards, the operator of a WTF shall be required to submit to the City a report, based on actual measurements, of written certification by a licensed professional engineer of compliance with applicable FCC MPE limits within 90 days of ~~any~~ a reduction in the FCC's MPE limits for electric and magnetic field strength and power density for transmitters, or of any modification of the WTF requiring a new submission under to the FCC standards to determine compliance ~~with MPE standards. If calculated levels exceed 50% of the FCC's MPE limits, the operator shall hire an approved engineer to measure the actual exposure levels.~~ If calculated levels are not in compliance with the FCC's MPE limits, the operator shall cease operation of the WTF until it is brought into compliance with the FCC's standards ~~and all other applicable requirements.~~ A report of these calculations and, required measurements, if any, and the ~~engineer's~~ findings with respect to compliance with the current MPE limits, shall be submitted to the City.

For purposes of this subdivision, "wireless telecommunications facility" means personal wireless service facilities as defined in the Telecommunications Act of 1996, including, but not limited to, facilities that transmit and/or receive electromagnetic signals for cellular radio telephone service, personal communications services, enhanced specialized mobile services, paging systems, and related technologies. Such facilities include antennas, microwave dishes, parabolic antennas, and all other types of equipment used in the transmission or reception of such signals; telecommunication towers or similar structures supporting said equipment; associated equipment cabinets and/or buildings; and all other accessory development used for the provision of personal wireless services. WTF does not include radio towers, television towers, and government-operated public safety networks.


Section 2. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of Council Chambers, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.



Office of the City Manager

ACTION CALENDAR  
March 28, 2017  
(Continued from February 14, 2017)

To: Honorable Mayor and Members of the City Council

From:  Dee Williams-Ridley, City Manager

Submitted by: Zach Cowan, City Attorney

Subject: Referral Response: Standards for Testing and Certification of DAS Antennas, Amending BMC Chapter 16.10

RECOMMENDATION:

Adopt first reading of an Ordinance adding Berkeley Municipal Code subdivision 16.10.100.G requiring regular testing of wireless telecommunications facilities in the public right of way to verify compliance with FCC standards.

FISCAL IMPACTS OF RECOMMENDATION:

None; any costs will be reimbursed by applicants/providers.

CURRENT SITUATION AND ITS EFFECTS

This report responds to a referral that originally appeared on the agenda of the December 13, 2016 Council meeting and was sponsored by Councilmember Wengraf.

BACKGROUND:

On December 13, 2016, the Council directed the City Manager to return with “draft ordinance language to amend Section 16.10.100 of the Berkeley Municipal Code to include Standards for Testing and Certification of DAS Antennas and return to the City Council within 60 days.” (Attachment 1.)

The attached ordinance (Attachment 2) complies incorporates this language, with minor technical clarifications.

ENVIRONMENTAL SUSTAINABILITY

There are no identifiable environmental effects or opportunities associated with the subject of this report.

RATIONALE FOR RECOMMENDATION

This report responds to a Council referral.

ALTERNATIVE ACTIONS CONSIDERED

None.

Referral Response: Ordinance for Standards for  
Testing and Certification of DAS Antennas

ACTION CALENDAR  
March 28, 2017

CONTACT PERSON

Zach Cowan, City Attorney, 981-6950

Attachments:

- 1: December 13, 2016 Council item, "Ordinance for Standards for Testing and Certification of DAS Antennas"
- 2: Ordinance



Councilmember Susan Wengraf  
District 6

CONSENT CALENDAR  
December 13, 2016

To: Honorable Mayor and Members of the City Council  
From: Councilmember Susan Wengraf  
Subject: Ordinance for Standards for Testing and Certification of DAS Antennas

RECOMMENDATION:

Request that the City Manager draft ordinance language to amend Section 16.10.100 of the Berkeley Municipal Code to include Standards for Testing and Certification of DAS Antennas and return to the City Council within 60 days.

BACKGROUND:

With the proliferation of the installation of DAS antennas throughout our city, including in residential areas, standards for measurements of radio frequency emissions should be established and certification required. Stringent requirements for testing and certifying radio frequency radiation levels and ensuring that they are in compliance with FCC standards should be part of our code governing wireless telecommunication facilities in our community.

Request that the following language be added as section BMC 16.10.100.G:

No wireless telecommunications facility ("WTF") or combination of facilities shall at any time produce power densities that exceed the FCC's limits for electric and magnetic field strength and power density for transmitters. In order to ensure continuing compliance with all applicable emission standards, all wireless telecommunications facilities shall submit reports as required by this subdivision. The City may require, at the operator's expense, independent verification of the results of any analysis. If an operator of a telecommunications facility fails to supply the required reports or fails to correct a violation of the FCC standard following notification, the PROW Permit that WTF shall be suspended until the operator complies with this subdivision.

1. Within forty five (45) days of initial operation or modification of a WTF, the operator of each telecommunications antenna associated with that WTF shall submit to the City written certification by a licensed professional engineer that the WTF's radio frequency emissions are in compliance with applicable FCC regulations. The engineer shall measure the radio frequency radiation of the approved WTF, including the cumulative impact from other nearby WTFs, and determine if it meets the FCC requirements. A report of these measurements and the engineer's findings with respect to compliance with the FCC's Maximum Permissible Exposure (MPE) limits shall be submitted to the City. If the report



shows that the WTF does not comply with applicable FCC requirements, the owner or operator shall cease operation of the WTF until it complies with, or has been modified to comply with, this standard. Proof of compliance shall be a certification provided by the engineer who prepared the original report. The City may require, at the applicant's expense, independent verification of the results of the analysis.

2. Prior to January 31 of every year, an authorized representative for the operator of a WTF permitted under this Chapter shall provide written certification to the City that each WTF is being operated in accordance with the applicable FCC MPE standards.

3. Once every two years, at the operator's expense, the City may conduct, or retain an approved engineer to conduct, an unannounced spot check of the WTF's compliance with applicable FCC MPE standards.

4. The operator of a WTF shall be required to submit to the City written certification by a licensed professional engineer of compliance with applicable FCC MPE limits within 90 days of any a reduction in the FCC's MPE limits for electric and magnetic field strength and power density for transmitters, or of any modification of the WTF requiring a new submission to the FCC to determine compliance with MPE standards. If calculated levels exceed 50% of the FCC's MPE limits, the operator shall hire an approved engineer to measure the actual exposure levels. If calculated levels are not in compliance with the FCC's MPE limit, the operator shall cease operation of the WTF until it is brought into compliance with the FCC's standards and all other applicable requirements. A report of these calculations, required measurements, if any, and the engineer's findings with respect to compliance with the current MPE limits shall be submitted to the City.

For purposes of this subdivision, "wireless telecommunications facility" means personal wireless service facilities as defined in the Telecommunications Act of 1996, including, but not limited to, facilities that transmit and/or receive electromagnetic signals for cellular radio telephone service, personal communications services, enhanced specialized mobile services, paging systems, and related technologies. Such facilities include antennas, microwave dishes, parabolic antennas, and all other types of equipment used in the transmission or reception of such signals; telecommunication towers or similar structures supporting said equipment; associated equipment cabinets and/or buildings; and all other accessory development used for the provision of personal wireless services. These facilities do not include radio towers, television towers, and government-operated public safety networks.

FINANCIAL IMPLICATIONS:

None

ENVIRONMENTAL SUSTAINABILITY:

Complies with environmental policies

CONTACT PERSON:

Councilmember Susan Wengraf, District 6      510-981-7160

## ORDINANCE NO. #,###-N.S

AMENDING BERKELEY MUNICIPAL CODE SECTION 16.10.100 TO REQUIRE REGULAR TESTING OF WIRELESS TELECOMMUNICATIONS FACILITIES IN THE PUBLIC RIGHT OF WAY IN ORDER TO VERIFY COMPLIANCE WITH FCC REQUIREMENTS

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requiring a new submission to the FCC to determine compliance with MPE standards. If calculated levels exceed 50% of the FCC's MPE limits, the operator shall hire an approved engineer to measure the actual exposure levels. If calculated levels are not in compliance with the FCC's MPE limit, the operator shall cease operation of the WTF until it is brought into compliance with the FCC's standards and all other applicable requirements. A report of these calculations, required measurements, if any, and the engineer's findings with respect to compliance with the current MPE limits shall be submitted to the City.

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