### 2.06 Submittal Requirements for Cellular Antenna Sites (2016)

**Reference:** 2016 SFBC, 2016 SFFC, 2016 SFMC and FCC OET Bulletin 65, 97-01 (including supplements); **FCC website:** <a href="http://www.fcc.gov/oet/rfsafety">http://www.fcc.gov/oet/rfsafety</a>

**Purpose:** This bulletin describes the information to be provided on plans submitted for a building permit to install or modify a cellular antenna site or equipment.

#### I. Submittal Requirements

- A. Provide a description of work on the plans.
- B. Plans shall include plan views and elevations showing all equipment locations and cable runs.
- C. Plans shall include antenna manufacturer specification sheets and equipment list on a drawing.
- D. Include a copy of the signed and stamped RF report on a drawing sheet as a reference to identify the exclusion area required to prevent occupational exposures in excess of the FCC guidelines (47CFR1.1310 and FCC OET Bulletin 65 edition 97-01).
- E. The RF report shall indicate whether or not the site under review is a part of a multiple transmitter site and shall show compliance with FCC 47CFR1.1307 (b)(3), as amended all transmitters shall not exceed 5% of the power density exposure limit.
- F. Drawings shall reflect the striped/exclusion areas for workers per the above RF Report with a minimum radius of 1-foot.
- G. Plans shall include a quantitative three-dimensional image of the RF levels from each antenna located near an egress point (e.g. penthouse stair; fire escape, roof walking paths; skylights, etc.).
- H. "Notice to Workers" warning signage, as applicable per the above RF Report, shall be permanently mounted at the stairwell side of the roof-access door (ANSI C95.2-1982 (Reference [3]) yellow or more durable color for outdoor longevity)
- I. Camouflaged antennas shall have 4-inch x 4-inch signage permanently mounted to the exterior of the RF screen as provided below. The sign shall be weatherproof with contrasting background color and shall contain the yellow triangle around the antenna symbol (ANSI C95.2-1982 (Reference [3]) yellow or more durable color for outdoor longevity). Signage location(s) and detail of the sign shall be included on the plans.
- J. Cables/wiring shall not be allowed in exit enclosures, smoke-proof towers, elevator shafts, or in front of dry standpipes. 2016 SFFC 1023.5 and 509.2
- K. Antennas shall not be mounted closer than the exclusion zone plus 4-feet for installations near fire escapes, stair penthouse doors, exterior standpipe outlets, skylights, or other fire department operations consideration.
- L. Stationary Storage Battery Systems shall comply with 2016 CFC, Section 608.

- M. The fire department may need to shut down the power to the cell site in an emergency situation. In order to reduce the site operator's possible loss of service, permanent emergency shutdown procedure signage shall be provided at the equipment room entrance.
  - 1. The sign shall include the following:
    - a. Emergency 24-hour/7-day a week Network Operations Center (NOC) / field technician telephone number for RF shut-down
    - b. Cell site identification number
    - c. Map showing location of electrical main shut-off (electrical main shall be clearly identified with a permanent red label and white lettering).
    - d. Map showing location of battery cabinets and breakers (cabinets and breakers shall be clearly identified with a permanent red label and white lettering).
    - e. Any other relevant information or procedures as required for the individual cellular site.
  - 2. The sign shall be clearly labeled in a phenolic label with a white background and black lettering. The title block shall be a red background and 1-inch high white lettering. Multiple signs may need to be installed based upon the cellular site configuration.
  - 3. A copy of the signage shall be included on a drawing sheet. See attached sample.

#### II. Drawing Notes

- A. Sign shall be a phenolic label with white background and black lettering. The title block shall be a red background and 1-inch high white lettering.
- B. Contractor to place signs in following locations:
  - 1. Cell site equipment room door
  - 2. Battery location within proximity of battery disconnect
  - 3. FCC room within proximity of the fire alarm panel
  - 4. Building's main electrical room within proximity of the main shutoff and/or at the cell site main electrical disconnect

## SAMPLE SIGNAGE ON NEXT PAGE



# FOR IMMEDIATE SHUT DOWN OF ALL RADIO FREQUENCY EMISSIONS OF THIS SITE,

1) CALL CONTACT NUMBER AND GIVE SITE IDENTIFICATION NO.

CONTACT PHONE NUMBER: 1-XXX-XXXX

SITE IDENTIFICATION NUMBER: XXXXXXX

2) DISCONNECT POWER AT MAIN SERVICE DISCONNECT:
Map and/or verbiage

3) DISCONNECT BACK-UP POWER AT BATTERY DISCONNECT:
Map and/or verbiage