

WNBC Application for Construction Permit at WTC

Construction Permit Certifications

Environmental Effect (Compliance with 47 C.F.R. Section 1.1306)

The antenna for the proposed facility will be located on the spire at One World Trade Center. Due to the height of the antenna above ground and its distance from areas of the building that are accessible to the public the RF power density is predicted to be below maximum permissible exposure levels in all uncontrolled areas. Calculations using the methodology in FCC Bulletin OET-65 show RF power density less than 0.5% the 1.86 mW/cm² maximum permissible exposure level for an uncontrolled environment at any roof-top height for buildings more than 700 meters from One World Trade Center, on roof-top heights up to 427 meters (1,400 feet) of any surrounding structures more than 215 meters (410 feet) from One World Trade Center, for roof-top heights up to 366 meters (1,200 feet) for structures more than 73 meters from One World Trade Center, and at any roof-top less than 244 meters (800 feet) in height and any location on the ground at any distance from One World Trade Center.

WNBC will participate in the RF safety program for the building and measurement of RF power density levels in areas accessible to workers on the spire or other areas near the top of the structure where RF power densities are predicted to be above public exposure limits for uncontrolled environments.

As the proposed facility will operate from a community antenna site on an existing structure designed to support antennas, will not expose the public to excessive RF power densities, and will protect workers from RF power densities above occupational exposure limits, this facility should not require an environmental assessment.

Post-transition DTV interference protection (Compliance with Sections 73.616 & 73.623(c))

An interference study using the procedures and methodology outlined in OET Bulletin 69 with a cell size for service analysis of 2.0 km/side and 0.20 km distance increments for the Longley-Rice Analysis shows no additional interference above the 0.5% level allowed in Section 73.616(e). We request the interference analysis be run with 2.0 km/side cell size and 0.20 km distance increments.

ERP and HAAT limits (Compliance with Section 73.622(i))

The 172.0 kW ERP and 519.1 meter height above average terrain comply with the ERP/HAAT limits in Section 73.622(i).

Protection of land-mobile operations on channels 14-20 (Section 73.623(e))

Not applicable. This application is for modification of an existing facility on channel 28.

Community of license coverage and antenna data (Compliance w/ Section 73.625 & 73.625(c))

The 48 dB μ V/m contour completely encompasses New York, NY, the community of license, as illustrated on the attached map. Elliptical polarization is proposed. The vertically polarized ERP will not exceed the horizontally polarized ERP. Section 73.625(c) does not require additional data for the proposed non-directional antenna.

Interference to radio astronomy, research and receiving installations (Section 73.1030)

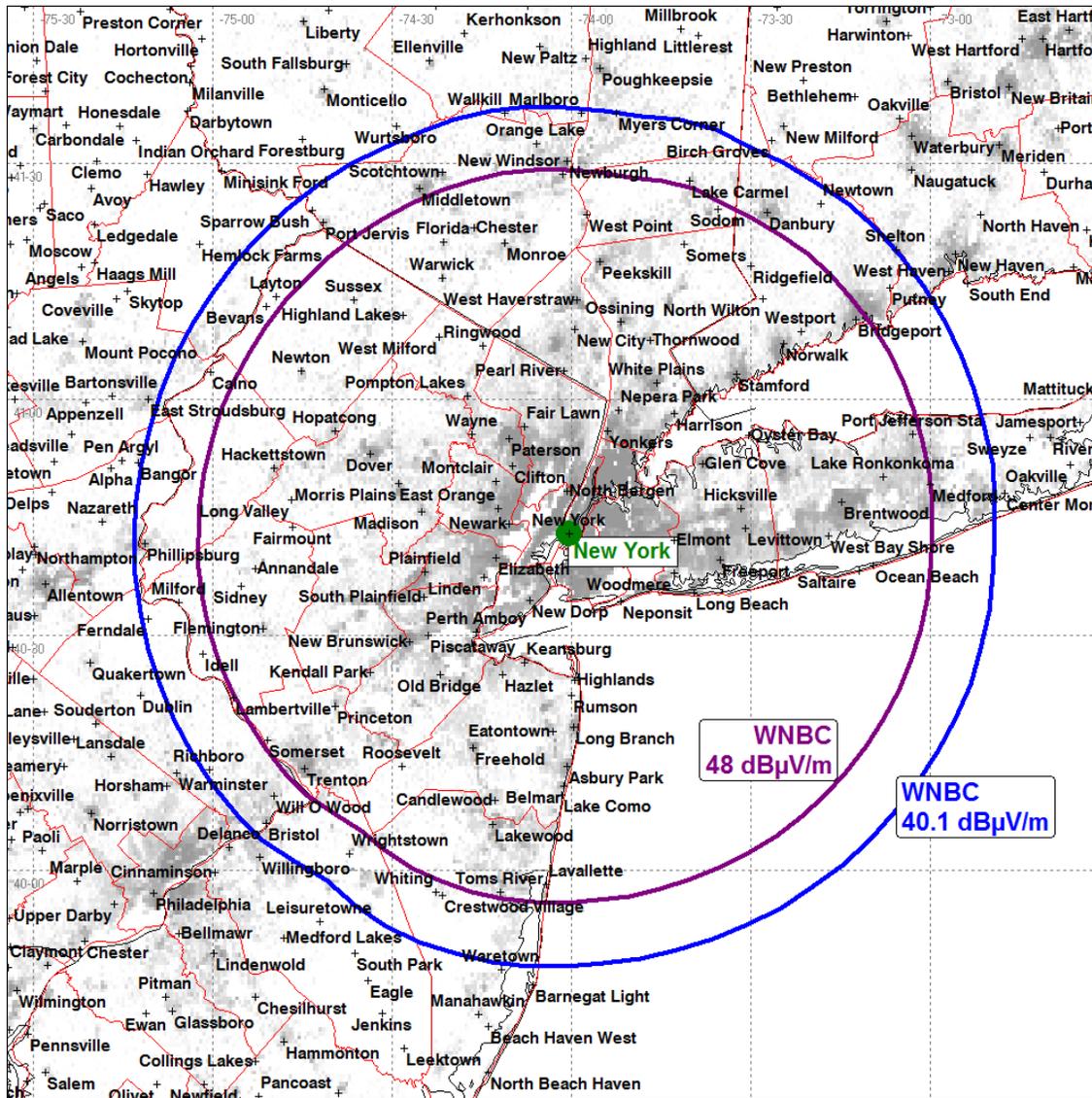
The proposed facility does not have the potential to interfere with the installations described in this section and thus notification is not required.

Station main studio location (Compliance with Section 73.1125)

No change is proposed to the station main studio location, which is current in compliance with Section 73.1125 and will remain in compliance with the proposed facilities.

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Map of contours of proposed facility showing compliance with Section 73.625



Contours created using RadioSoft ComStudy Version 2.2.14.19 with the technical parameters described in the attached application for construction permit for minor modification of facilities for WNBC, New York, NY.