

ENVIRONMENTAL STUDY

**NBC STATIONS MANAGEMENT, INC.
STATION WTVJ-DT MIAMI, FLORIDA
CH 31 1000 KW 311 METERS**

NBC Stations Management, Inc. (herein NBC) proposes herein to construct the television transmission facilities of WTVJ-DT, channel 31 (572 to 578 megahertz (MHz.)), Miami, Florida, on an existing tower located at geographic coordinates 25° 58' 07" North Latitude, 80° 13' 20" West Longitude (referenced to 1927 North American Datum), using a horizontally polarized omnidirectional antenna, 1000 kilowatts (kW) horizontal effective radiated power (ERP) and an antenna radiation center height of 311 meters above average terrain. The proposed WTVJ-DT antenna radiation center is 311.3 meters above ground level (AGL).

An analysis has been made of the human exposure to RFR using the calculation methodology described in *OET Bulletin 65, Edition 97-01*, prepared by the FCC Office of Engineering and Technology. A vertical plane relative field factor of 0.07, the maximum value obtained from the manufacturer's theoretical vertical plane radiation pattern for the proposed WTVJ-DT transmitting antenna (Dielectric, type TFU-20GTH O4) for any angle outside of the main vertical lobe, and the proposed total WTVJ-DT ERP of 1000 kW were used in the calculation of the WTVJ-DT power density. To account for ground reflections the U.S. Environmental Protection Agency recommended reflection coefficient of 1.6 was included in the calculation. The WTVJ-DT power density calculation reported herein was made at 572 MHz., the lower edge of the WTVJ-DT channel.

The FCC maximum permissible exposure (MPE) limit for general population/uncontrolled exposure is 0.38 milliwatt-per-square-centimeter (mW/cm^2) at 572 MHz. The FCC MPE limit for occupational/controlled exposure is 1.9 mW/cm^2 at 572 MHz. At the base of the tower, the radiation center of the proposed WTVJ-DT antenna is 309.3 meters above a reference point at two meters AGL and the calculated WTVJ-DT power density (for a relative field of 0.07) is 0.0017 mW/cm^2 . This power density is 0.45 percent of the FCC MPE limit for general population/uncontrolled exposure and 0.09 percent of the FCC MPE limit for occupational/controlled exposure. The calculated exposure at the base of the tower represents a much higher exposure than any actual location on the ground would be expected to receive from the proposed antenna.

Pursuant to the provisions of *OET Bulletin 65, Edition 97-01*, at multiple-user transmitter sites only those licensees whose transmitters produce power density levels in excess of 5.0 percent of the applicable exposure limit are considered "significant contributors" who

share responsibility for actions necessary to bring the local RFR environment into compliance with FCC exposure limits. Since the proposed WTVJ-DT operation will contribute far less than 5.0 percent of the most restrictive permissible exposure at any location on the ground at the multiple-user site, WTVJ-DT is not considered a “significant contributor” to the local RF exposure environment and contributions to exposure from other sources in the vicinity of WTVJ-DT were not taken into account in this analysis.

While not a “significant contributor” to the exposure levels at any location on the ground, the WTVJ-DT operation will be a “significant contributor” to exposure at locations on the supporting structure near the WTVJ-DT antenna when it is in use. If work is done on the tower in an area where overexposure could occur while the antenna is in use, NBC will take all actions necessary to prevent the overexposure of workers on the tower including reducing the transmitter power of WTVJ-DT or ceasing transmission altogether. Additionally, NBC will cooperate with other site users to assure that work is performed at the site without exceeding the FCC MPEs for occupational/controlled exposure.

The instant proposal is categorically excluded from environmental processing since none of the conditions of Sections 1.1306(b)(1), (2), or (3) of the FCC Rules would be involved for the following reasons:

1. The WTVJ-DT channel 31 television facility will utilize an existing supporting structure that is not in or near any location referenced in Section 1.1306(b)(1) of the FCC Rules as being of environmental interest.
2. The provision of Section 1.1306(b)(2) of the FCC Rules relating to the use of high-intensity strobe lighting does not apply since location on an existing supporting structure is proposed.
3. Finally, with regard to RFR exposure concerns, compliance with applicable FCC MPE limits would be achieved.