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**CONSULTING ENGINEERS**  
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**FCC FORM 301, EXHIBIT 44**  
**ENVIRONMENTAL ANALYSIS**  
**APPLICATION FOR MODIFICATION OF**  
**CONSTRUCTION PERMIT**  
**(FCC FILE NUMBER BPCDT-19991101AJP)**  
**URBANA-CHAMPAIGN BROADCAST PARTNERS**  
**STATION WCCU-DT**  
**URBANA, ILLINOIS**  
**CH 26                      507 KW (MAX-BT)                      114 METERS**

This environmental analysis was prepared on behalf of Urbana-Champaign Broadcasting Partners (hereinafter UCBP), permittee of station WCCU-DT. Urbana, Illinois, in support of an FCC Form 301 minor change application for modification of construction permit for WCCU-DT that seeks to reduce authorized average effective radiated power (ERP) from 1000 kilowatts (kW) to 507 kW, to reduce authorized antenna radiation center heights from 143 meters above ground level (AGL), 353 meters above mean sea level (AMSL), and 138 meters above average terrain (AAT) to 125 meters AGL, 335 meters AMSL, and 114 meters AAT.

WCCU-DT is currently authorized (FCC File Number BPCDT-19991101AJP) for DTV operation on channel 26 (542 to 548 megahertz (MHz)) with 1000 kW average ERP, horizontally polarized and 138 meters antenna

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radiation center height above average terrain (HAAT) from a site located at geographic coordinates 40° 18' 46" North Latitude, 87° 55' 00" West Longitude, referenced to the 1927 North American Datum.

The instant application proposes to decrease maximum average ERP to 507 kW and to decrease antenna radiation center HAAT to 114 meters utilizing a Dielectric Communications, type TFU-16DSB-M(C) directional transmitting antenna from the authorized WCCU-DT site. The newly proposed WCCU-DT antenna radiation center is 125 meters above ground level (AGL). The antenna structure registration (ASR) number for the WCCU-DT tower is 1007955.

Public access to the communications site at which the WCCU-DT antenna and supporting structure are located is limited by a gate across the road leading to the site. Public access to the WCCU-DT antenna and supporting structure is restricted further by a three-meter chain link fence topped with barbed wire that encircles the base of the WCCU-DT supporting structure. There is no casual or inadvertent access to the WCCU-DT transmitter site by the general public.

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 conservative vertical plane relative field factor of 0.12, obtained from the manufacturer's theoretical vertical plane radiation pattern for the WCCU-DT, Dielectric Communications, type TFU-16DSB-M(C), transmitting antenna, and the WCCU-DT average ERP of 507 kW were used in the calculation of power density. To account for ground reflections, a coefficient of 1.6 also was included in the calculations. The WCCU-DT power density calculations, the results of which are reported herein, were made at 542 MHz, the lower edge of the WCCU-DT channel assignment.

The FCC maximum permissible exposure (MPE) for general population/uncontrolled exposure is 0.36 milliwatt-per-square-centimeter (mW/cm<sup>2</sup>) at 542 MHz. The FCC MPE limit for occupational/controlled exposure is 1.8 mW/cm<sup>2</sup> at 542 MHz. At a reference point two meters AGL at the base of the WCCU-DT supporting structure, the calculated WCCU-DT power density is 0.016 mW/cm<sup>2</sup>, which is 4.4 percent of the FCC MPE limit for general population/uncontrolled exposure, and 0.89 percent of the FCC MPE limit for occupational/controlled exposure.

Pursuant to the provisions of *OET Bulletin 65, Edition 97-01*, at multiple-user 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” and share responsibility for actions necessary to bring the local RFR environment into compliance with FCC exposure limits. Since the proposed WCCU-DT operation will contribute less than 5.0 percent of the more restrictive MPE at any location on the ground at the site, WCCU-DT is not considered a “significant contributor” to the local RF exposure environment and contributions to exposure from other sources in the vicinity of WCCU-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 WCCU-DT operation will be a “significant contributor” to exposure at locations on the supporting structure near the WCCU-DT transmitting antenna. If work is done on the tower in an area where overexposure could occur, UCBP will take action necessary to prevent the overexposure of workers on the tower, including reducing WCCU-DT transmitter power or ceasing WCCU-DT operation completely. Additionally,

UCBP 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 process 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 WCCU-DT channel 26 DTV facility utilizes an existing supporting structure which 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 the WCCU-DT existing supporting structure is not located in a residential neighborhood as defined by applicable zoning law.
3. Finally, with regard to RFR exposure concerns, compliance with applicable FCC MPE limits would be achieved.

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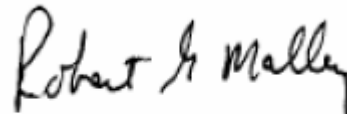
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**CERTIFICATION**

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed on December 21, 2004.



Robert G. Mallery



Tiffany E. Ligon